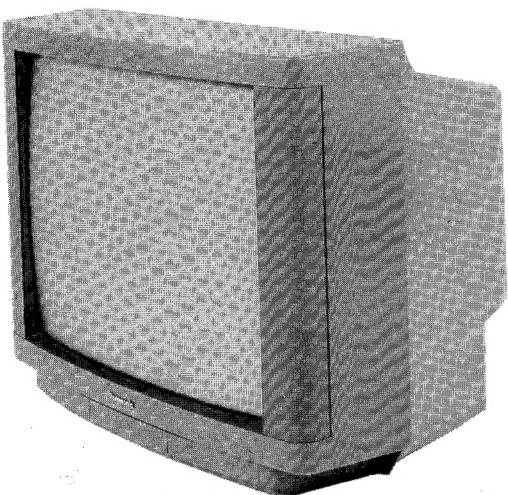


# Service Manual



## Colour Television TX-28X1C / TX-25XIC TX-28X1CP / TX-25X1CP ALPHA - 4 Chassis

### SPECIFICATIONS

(Information in brackets refer to TX-25X1C)

<b>Power Source :</b>	230 V AC, 50Hz
<b>Power Consumption :</b>	103W (98W)
<b>Aerial Impedance :</b>	75Ω unbalanced, Coaxial Type
<b>Receiving System :</b>	PAL B,G SECAM B,G (D,K. X1CP ONLY)
<b>Receiving Channels :</b>	VHF E2 – E12 VHF H1 – H2 (ITALY) VHF A – H (ITALY) (VHF R1 – R12. – X1CP ONLY) UHF E21 – E69 CATV (S01 – S05) CATV S1 – S10 (M1 – M10) CATV S11 – S20 (U1 – U10) CATV S21 – S41 (HYPERBAND)
<b>Intermediate Frequency :</b>	Video 38.9 MHz Sound 33.4 MHz Colour 34.47 MHz (PAL) 34.5 MHz (SECAM) 34.65 MHz (SECAM)

### Video / Audio Terminals :

AV1 IN	Video (21 pin )	1 Vp-p 75Ω
	Audio (21 pin )	500 mV rms 10kΩ
	RGB (21 pin )	
AV1 OUT	Video (21 pin )	1 Vp-p 75Ω
	Audio (21 pin )	500 mV rms 1kΩ
AV2 IN	Video (21 pin )	1 Vp-p 75Ω
	Audio (21 pin )	500 mV rms 10 kΩ
	S-Video IN (21 pin )	Y : 1 Vp-p 75Ω C : 0.3 Vp-p 75Ω
AV2 OUT	Video (21 pin )	1 Vp-p 75Ω
	Audio (21 pin )	500 mV rms 1kΩ
	Audio (RCA x 2)	500mV rms 1KΩ
AV3 IN	S-Video IN (4-pin )	Y : 1 Vp-p 75Ω C : 0.3 Vp-p 75Ω
	Audio (RCA x 2)	500 mV rms 10kΩ
	Video (RCA x 1)	1 Vp-p 75Ω

**High Voltage :** 28.0kV (+ 0.7 / - 1.0) KV at zero beam current  
(27.3KV (+ 0.7 / - 1.0) KV at zero beam current

**Picture Tube :** 70 cm (63cm) FST 110°  
**Visible screen size:** 66 cm (59cm) FST 110°

**Audio Output :** 2 x 10 W (Music Power)  
Internal Speaker 8 Ω Impedance

**Speakers** 2 x 12.5cm x 7.5cm Oval

**Headphones** 1 x 8 Ω Impedance

**Accessories supplied :** Remote Control  
R6 (UM3) Battery

**Dimensions :** Height : 551mm (507mm)  
Width : 686mm (635mm)  
Depth : 489mm (467mm)

**Net Weight** 38kg (32.5kg)

Specifications are subject to change without notice.  
Weight and dimensions shown are approximate.

### TECHNISCHE DATEN

(Werte in Klammern gelten nur für TX-25X1C)

<b>Netzspannung :</b>	230 V AC, 50Hz
<b>Leistungsaufnahme :</b>	103W (98W)
<b>Antennenimpedanz :</b>	75Ω asymmetrisch, Koaxial-Typ
<b>Empfangssystem :</b>	PAL B,G SECAM B,G (D,K. X1CP)
<b>Empfangsbereiche :</b>	VHF E2 – E12 VHF H1 – H2 (ITALY) VHF A – H (ITALY) (VHF R1 – R12. – X1CP ) UHF E21 – E69 CATV (S01 – S05) CATV S1 – S10 (M1 – M10) CATV S11 – S20 (U1 – U10) CATV S21 – S41 (HYPERBAND)
<b>Zwischenfrequenz:</b>	Bilde 38.9 MHz Ton 33.4 MHz Farbe 34.47 MHz (PAL) 34.5 MHz (SECAM) 34.65 MHz (SECAM)
<b>Video / Audio Anschlüsse :</b>	AV1 EINGANG Video (21 pin ) 1 Vp-p 75Ω Audio (21 pin ) 500 mV rms 10kΩ
	AV1 AUSGANG Video (21 pin ) 1 Vp-p 75Ω Audio (21 pin ) 500 mV rms 1kΩ
	AV2 EINGANG Video (21 pin ) 1 Vp-p 75Ω Audio (21 pin ) 500 mV rms 10 kΩ S-Video IN Y : 1 Vp-p 75Ω (21 pin ) C : 0.3 Vp-p 75Ω
	AV2 AUSGANG Video (21 pin ) 1 Vp-p 75Ω Audio (21 pin ) 500 mV rms 1kΩ Audio (RCA x 2) 500 mV rms 1KΩ
	AV3 EINGANG S-Video IN Y : 1 Vp-p 75Ω (4-pin ) C : 0.3 Vp-p 75Ω
	AV3 AUSGANG Audio (RCA x 2) 500 mV rms 10kΩ Video (RCA x 1) 1 Vp-p 75Ω
<b>Hochspannung :</b>	28.0kV bei Nullstrahlstrom (27.3kV bei Nullstrahlstrom)
<b>Bildrohre :</b>	70 cm (63 cm) 110° Ablenkung
<b>Visuelle Diagonale :</b>	66 cm (59 cm) 110° Ablenkung
<b>Ton Ausgangsleistung :</b>	2 x 10W (Musikleistung) 8 Ω Impedanz
<b>Einbaulautsprecher</b>	2 x 12.5 cm x 7.5 cm Oval
<b>Lautsprecher</b>	1 x 8 Ω Impedanz
<b>Kopfhörer</b>	Fernbedienung
<b>Mitgel. Zubehör</b>	R6 (UM3) Batterien
<b>Abmessungen :</b>	Höhe : 551mm (507mm) Breite : 686mm (635mm) Tiefe : 489mm (467mm)
<b>Gewicht :</b>	38 kg (32.5kg)

Änderungen der technischen Daten vorbehalten.  
Gewichte und Abmessungen sind Näherungsangaben.

**Panasonic**

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## SAFETY PRECAUTIONS

### General Guide Lines

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the AC outlet.
5. Potentials as high as 29.0 kV are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture to the chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

## LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis the reading must be infinite.

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## SICHERHEITSVORKEHRUNGEN

### Allgemeine Richtlinien

1. Es ist empfehlenswert einen Trenntransformator in die Stromversorgung zu schalten, bevor Reparaturen an einem Gerät vorgenommen werden, dessen Chassis unter Spannung steht.
2. Bei der Durchführung von Servicearbeiten dürfen die ursprünglichen Kabelanschlüssen nicht vertauscht werden. Dies gilt insbesondere für die Anschlüsse im Hochspannungsteil. Hat sich ein Kurzschluß ereignet, dann sind alle Teile, an denen Spuren von Überhitzung sichtbar sind, auszuwechseln.
3. Nach Beenden der Servicearbeiten ist sicherzustellen, daß alle Sicherheitsvorrichtungen, wie Isolationsstege, Isolationspapiere, Abschirmungen und Isolations-R-C-Glieder wieder richtig eingesetzt sind.
4. Wenn der Fernseher während längerer Zeit nicht in Betrieb gesetzt wird, sollte der Netzstecker aus der Netzsteckdose gezogen werden.
5. Im Betrieb sind Spannungen bis zu 29.0kV in diesem Gerät vorhanden. Die Inbetriebnahme des Fernsehers ohne aufgesetzte Rückwand bringt die Gefahren elektrischen Schläges von der Fernseher - Stromversorgung mit sich. Servicearbeiten sollten daher auch nie durch Personen versucht werden, die nicht in vollem Umfang mit den Sicherheitsvorkehrungen beim Umgang mit Hochspannungsgeräten vertraut sind. Vor der Handhabung mit der Bildröhre ist die Anode der Bildrohre immer an dem Empfängerchassis zu entladen.
6. Nach Beenden der Servicearbeiten sind die folgenden Krichstrom-Prüfungen durchzuführen, um den Kunden vor der Gefahr eines elektrischen Schläges zu schützen.

## MESSUNG DES ISOLATIONSWIDERSTANDES IM ABGESCHALTETEN ZUSTAND

1. Den Netzstecker aus der Netzsteckdose ziehen und die beiden Steckerstifte kurzschließen.
2. Den Geräteschalter des Fernsehgerätes einschalten.
3. Mit einem Ohmmeter den Widerstandswert zwischen dem überbrückten Netzkabelstecker und jendem zugänglichen Metallteil am Gehäuse des Fernsehgerätes, wie Schraubenköpfen, Antennen, Achsen der Regler, Griffassungen usw. messen. Wenn ein zugängliches Metallteil keine Rückleitung zum Chassis hat, muß die Anzeige unendlich betragen.

## LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 2k ohm 10W resistor in series with an exposed metallic part on the receiver and an earth such as a water pipe.
3. Use an AC voltmeter with high impedance to measure the potential across the resistor.
4. Check each exposed Metallic part and check the voltage at each point.
5. Reverse the AC plug at the outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 1.4 Vrms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

## HOT CHECK CIRCUIT

### SCHALTUNGS AUFBAU FÜR PRÜFUNG IM EINGESCHALTETEN ZUSTAND

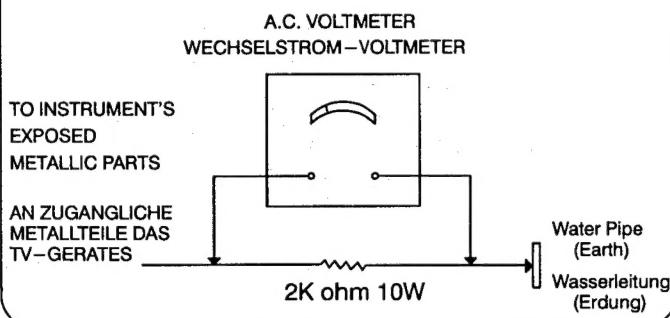


Fig.1  
Abb.1

## X-RADIATION WARNING

1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service ensure that the jig is capable of handling 29.0 kV without causing X-Radiation.

**NOTE :** It is important to use an accurate periodically calibrated high voltage meter

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate 28.0 KV (+0.7/-1.0) KV (27.3KV (+0.7/-1.0) KV (TX25X1C/P), if the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent any X-Radiation possibility, it is essential to use the specified tube.

## SHUT DOWN TEST

This test must be made as a final check before the set is returned to the customer.

1. With the rear cover removed, supply nominal 230V AC to the set, turn on the power switch.
2. Receive a Phillips pattern.
3. Supply - 40V DC to TPE7, and confirm that the shut down circuit does not operate.
4. Supply - 60V DC to TPE7, and confirm that the shut down circuit operates.

## MESSUNG DES KRIECHSTROMS IM EINGESCHALTETEN ZUSTAND

1. Den Netzstecker direkt in eine Netzteckdose stecken. Für diese Messung keinen Trenntransformator verwenden.
2. Einen 2k  $\Omega$  / 10W-Widerstand in Serie mit einem von außen zugänglichen Metallteil am Fernsehgerät und einer guten, Erdung z.B Wasserleitung, anschließen.
3. Ein Wechselstrom-Voltmeter mit einem Meßbereich von 1000 Ohm.Volt oder größer verwenden, um die Spannung über den Widerstand zu messen.
4. Jedes zugängliche Metallteil prüfen, und an jedem Punkt die Spannung messen.
5. Den Netztecker umgekehrt in die Steckdose stecken und jede der obigen Messungen wiederholen.
6. Die Spannung darf an keinem der Punkte 1.4V eff. überschreiten. Wird dieser Wert nicht eingehalten, besteht die Gefahr eines elektrischen Schläges, und das Fernsehgerät sollte daher repariert und nachgeprüft werden, bevor es an den Kunden zurückgegeben wird.

## RÖNTGENSTRÄHLUNG

### ACHTUNG :

1. Potentielle Quellen von Röntgenstrahlung in Fernsehgeräten sind das Hochspannungsteil und die Bildröhre.
2. Bei Verwendung eines Bildröhren-Prüfgerätes für den Service ist sicherzustellen, daß es für die Belastung von 29.0 kV geeignet ist, ohne daß eine Röntgenstrahlung verursacht wird.

**ANMERKUNG :** Es ist wichtig, daß ein präzises, regelmäßig geprüftes Voltmeter verwendet wird.

1. Helligkeit auf Minimum stellen.
2. Die Hochspannung messen. Die Anzeige des Instrumentes sollte 28.0 (+0.7/-1.0) KV (27.3KV (+0.7/-1.0) KV (TX-25X1C/P) betragen. Falls die Anzeige diese Toleranzgrenzen überschreitet, ist die sofortige Behebung nötig, um die Möglichkeit vorzeitigen Komponentenausfalls zu verhindern.
3. Um die Möglichkeit von Röntgenstrahlung zu begrenzen, ist es wichtig, daß nur die vorgeschriebene Bildröhre verwendet wird.

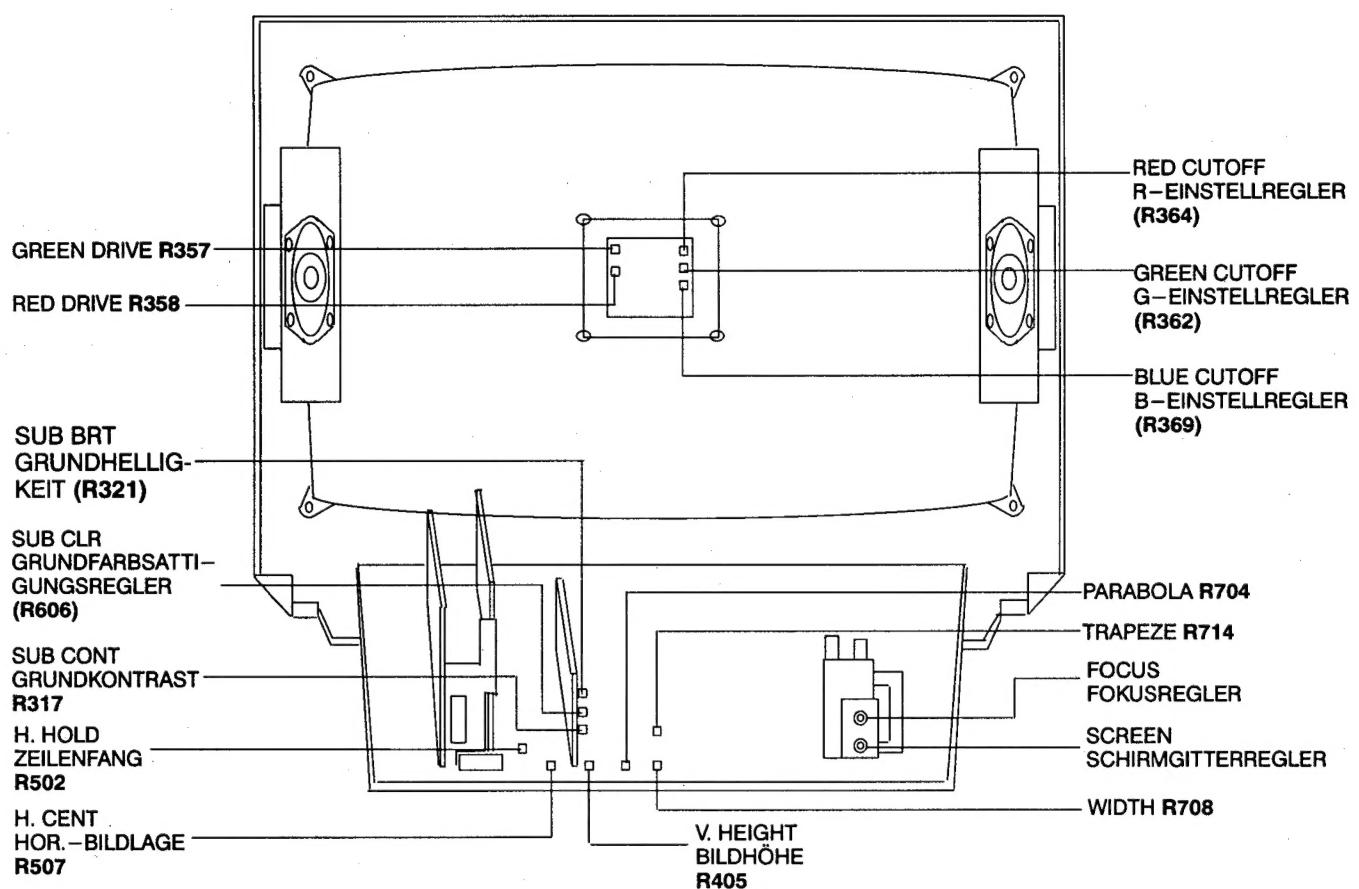
## TEST KURZSCHLUSS-SICHERHEITSSCHALTUNG

Dieser Test muß als letzte Prüfung vor der Rückgabe des Gertes an den Kunden durchgeführt werden

1. Bei abgenommener Rückwand ist dem Gerät 230V Nennspannung zuzuführen, und der Geräteschalter einzuschalten.
2. Ein Phillips-Muster empfangen.
3. Gleichspannung von - 40V an TPE7 einspeisen und sicherstellen, daß die Kurzschluß-Sicherheits-Schaltung nicht anspricht.
4. Gleichspannung von - 60V an TPE7 einspeisen und sich vergewissern, daß die Kurzschluß-Sicherheitsschaltung jetzt anspricht.

**LOCATION OF CONTROLS**

**LAGE DER EINSTELLREGLER**



**SERVICE HINTS**

1. Insert a flat blade screwdriver into the slot of each rear cover fixing clip and release the 6 rear cover fixing clips as shown in fig.3.
2. Remove the 5 screws (A) as shown in fig.4.

**WARTUNGSHINWEISE**

1. Mit einem schmalen, flachen Schraubendreher Klammen der Rückwand öffnen, siehe Abb.3.
2. Die 5 Schrauben (A) entfernen, siehe Abb.4.

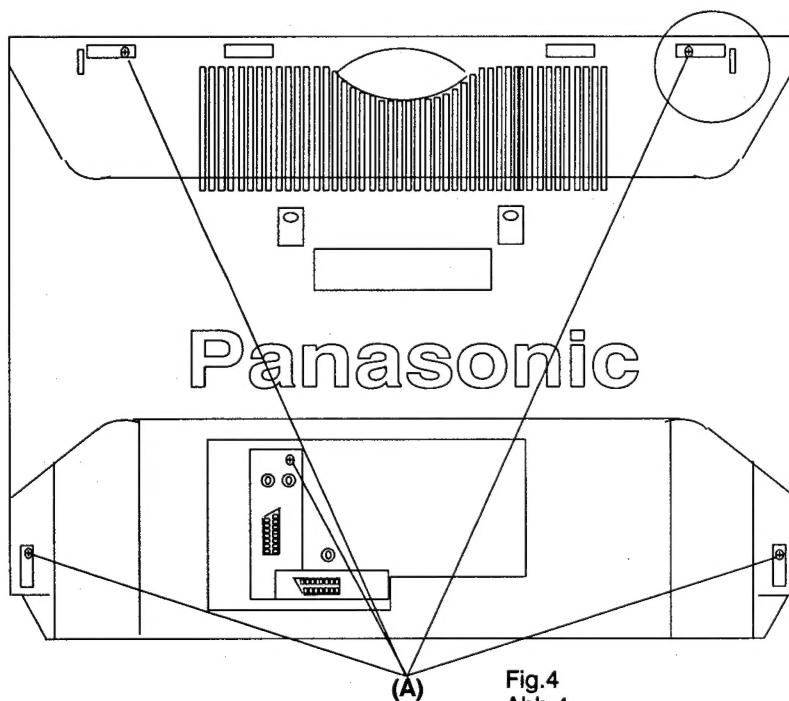


Fig.4  
Abb.4.

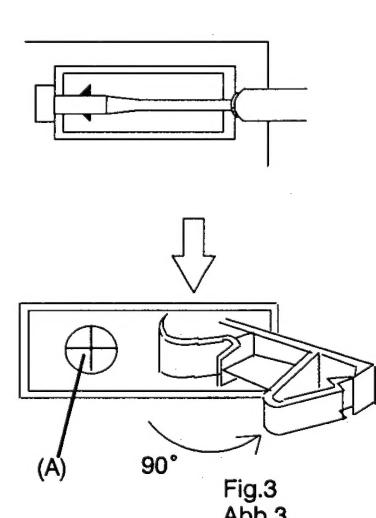


Fig.3  
Abb.3.

## HOW TO MOVE CHASSIS INTO SERVICE POSITION

1. Remove screw (B) as shown in fig.5.
2. Remove the 2 screws (C) as shown in fig.6.
3. Hold and lift the tabs (D) of chassis as shown in fig.6. then draw the chassis towards you.
4. Turn the chassis through 90°, anti-clockwise, as shown in fig.7.
5. Clip (E) of the chassis bracket onto the support bracket as shown in fig.8.
6. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer.

## CHASSIS IN SERVICESTELLUNG BRINGEN

1. Die 1 Schraube (B) entfernen (siehe Abb.5.)
2. Die 2 Schraube (C) entfernen (siehe Abb.6.)
3. Das chassis an den beiden Laschen (D) haltend anheben und dann gegen sich herausziehen. (siehe Abb.6.)
4. Drehen Sie jetzt das Chassis um 90° entgegen dem Uhrzeiger in die position wie in Abb.7. gezeigt.
5. Denclip (E) des Chassishalters in den dafür vorgesehenen Halteteil an der Gehäuseseite schieben, wie in Abb.8. gezeigt.
6. Nach Servicearbeiten darauf achten, daß sich alle Verbindungskabel in ihren Original positionen befinden, bevor das Gerät an den Kunden ausgeliefert wird.

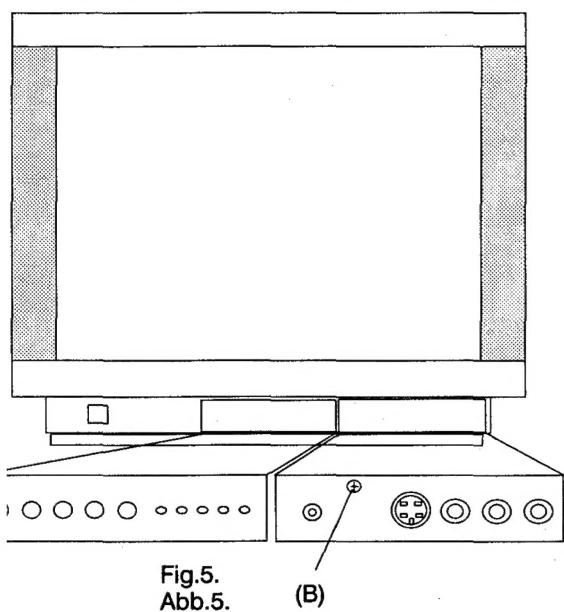


Fig.5.  
Abb.5.

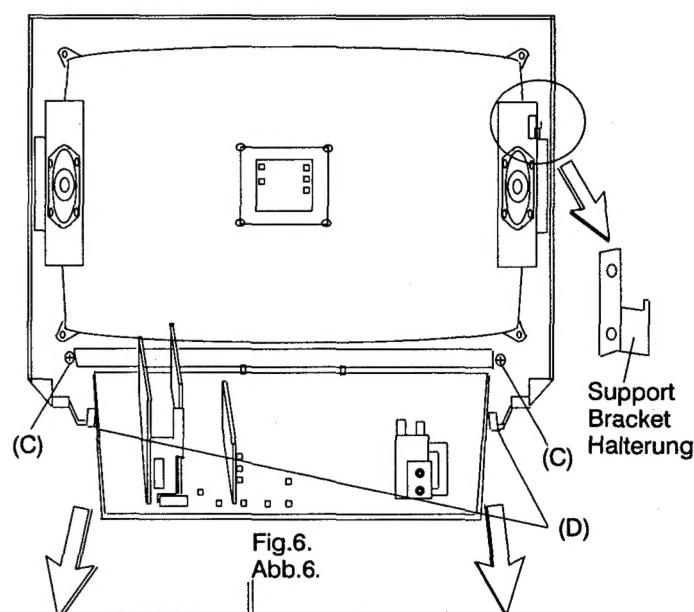


Fig.6.  
Abb.6.

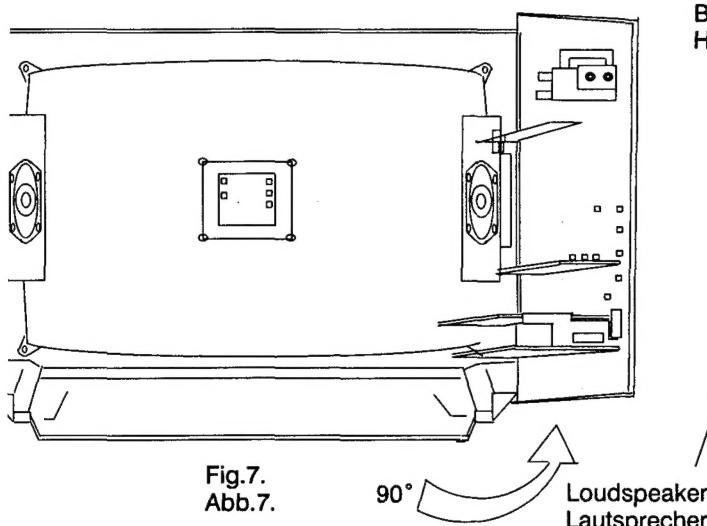


Fig.7.  
Abb.7.

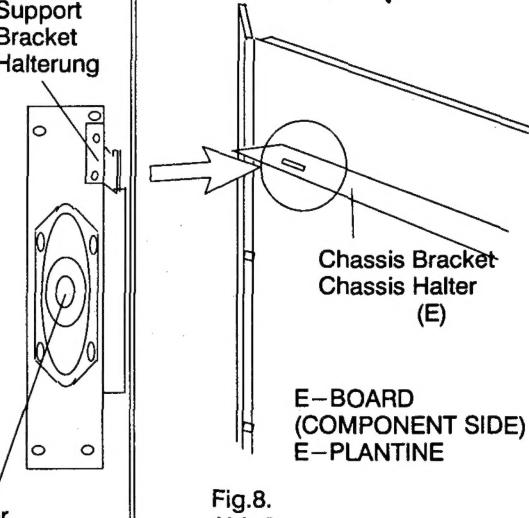


Fig.8.  
Abb.8.

## SERVICE POSITION FOR B, H, C BOARDS

1. Remove the appropriate board to be serviced from the E-Board
2. Connect the extension lead wires between the board and E-Board and then position away from the main chassis and ensure they are not touching
3. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer

### Note :

The extension wire lead kit is supplied as a service kit, part number Tzs2El000.

## SERVICESTELLUNG FÜR B, H, UND C-PLANTINE

1. Lösen Sie zu reparierende Plantine von der E-Plantine
2. Dann verwenden Sie die Verlängerungskabel, um die Plantinewieder mit der E-Plantine zuverbinden. Achten Sie auf genügenden Abstand, damit es zu keinem Kurzschluß kommt.
3. Nach Beendigung der Reparatur bringen Sie die Plantine wieder in die Orginal position

### Hinweis :

Das Verlängerungskabel-Set kann unter der Bestellnummer Tzs2El000. als Serviceartikel bestellt werden.

## ADJUSTMENTS

ITEM/PREPARATION	ADJUSTMENT PROCEDURE
<b>+B VOLTAGE</b> 1. Operate the TV set. 2. Set controls to : Brightness                 minimum. Sub brightness            minimum.	1. Confirm the indicated test points for the specified voltage. TPE1:       150.0   +/-1.5V    TPE5:       12.0   +/-1.0V TPE2:       5.0       +/-0.3V    TPE9:       31.0   +/-2.5V TPE3:       30.0       +/-1.0V    TPE28:      28.0   +/-1.0V TPE4:       15.5       +/-1.0V    TPE10:      210.0 +/10.0V TPE66:      8.0       +/-1.0V
<b>AFC</b> 1. Supply 39.5MHz continuous wave from an oscillator to <b>TPB20</b> (0.5V p-p, 75Ω terminated) 2. Connect a DC voltmeter to <b>TPB25</b> . 3. Operate the TV set.	1. Adjust <b>L106</b> so that the voltage at <b>TPB25</b> becomes 4.0 (+/- 0.5V). 2. Change the frequency and confirm the voltage as shown below. +100KHz less than 1.5V. -100KHz more than 5.5V.
<b>RF AGC</b> 1. Receive a Philips Pattern. 2. Set the input level to 63dB +/-2dB (75Ω open). 3. Connect an oscilloscope between <b>TPB24</b> and earth in DC mode.	1. Turn RF AGC control ( <b>R128</b> ) fully clockwise. 2. Slowly turn <b>R128</b> counterclockwise to set it at the point before the voltage at <b>TPB24</b> drops. <b>NOTE:</b> In this case, gain range of the oscilloscope is 1V/div, and set <b>R128</b> to a point where this voltage drops by 0.2V.
<b>HIGH VOLTAGE</b> 1. Receive a cross hatch pattern. 2. Set controls to: Brightness                 minimum. Contrast                   minimum. Sub brightness            minimum. (Zero beam current)	1. Connect a DC voltmeter to <b>TPE1</b> and confirm the Voltage is 150V (+/- 1.5V). 2. Connect a high-voltage meter (Electrostatic type) to the anode of the picture tube. 3. Confirm that the high voltage is within a range of 28.0kV(+0.7/1.0)kV (27.3kV +0.7kV-1.0kV for TX-25X1C / P ).
<b>CHANNEL SEPARATION</b> 1. Receive a Stereo Signal with 60% modulation at 1KHz for R channel, 0% modulation for L channel. 2. Connect an oscilloscope to <b>TPB33</b> .	1. Adjust <b>R2204</b> to minimize signal level at <b>TPB33</b>

## JUSTIERUNGEN

ITEM/PREPARATION	ADJUSTMENT PROCEDURE
<b>VERSORGUNGSSPANNUNG B</b>  1. TV einschalten 2. Die Regler wie folgt einstellen: Helligkeit minimum. Grundhelligkeitsregler minimum.	1. Die Messungen an den Testpunkten sollen folgende Betriebsspannungen ergeben. <b>TPE1:</b> 150.0 $+/-1.5V$ <b>TPE5:</b> 12.0 $+/-1.0V$ <b>TPE2:</b> 5.0 $+/-0.3V$ <b>TPE9:</b> 31.0 $+/-2.5V$ <b>TPE3:</b> 30.0 $+/-1.0V$ <b>TPE28:</b> 28.0 $+/-1.0V$ <b>TPE4:</b> 15.5 $+/-1.0V$ <b>TPE10:</b> 210.0 $+/-10.0V$ <b>TPE66:</b> 8.0 $+/-1.0V$
<b>AFC</b>  1. Kanal im UHF-Bereich wählen. 2. Meßsender auf 38.9 MHz einstellen und an den Tuner-Testpunkt anschließen. 3. DVM an <b>TPB25</b> anschließen. 4. TV einschalten.	1. Spule <b>L106</b> so abgleichen, daß die Gleichspannung am <b>TPB25</b> 4.0 ( $+/-0.5V$ ) beträgt. 2. Die Frequenz ändern, und die Spannung wie folgt kontrolloeren. +100KHz Kleiner als 1.5V. -100KHz Größer als 5.5V.
<b>RF AGC</b>  1. Empfang eines Farbbalken – Testbildes. 2. Das Eingangssignal soll mit 63dB $+/-2dB$ ( $75\Omega$ eingespeist werden). 3. Oszilloskop an <b>TPB24</b> in DC-Funktion anklemmen	1. Der Regler RF AGC <b>R128</b> ist auf Rechtsanchlag zu stellen. 2. Den Regler <b>R128</b> so einstellen, daß er kurz vor dem Punkt steht, an dem der Messwert an <b>TPB24</b> absinkt.
<b>HOCHSPANNUNG</b>  1. TV einschalten 2. Die regler wie folgt einstellen Helligkeit minimum. Grundhelligkeitsregler minimum. Kontrast minimum.	1. Die Hochspannung darf bei 28.0KV eine Toleranz von $+0.7 / 1.0KV$ ( $27.3KV +0.7KV / - 1.0KV$ (TX-25X1C / P))  <b>Anmerkung :</b> Falls die Hochspannung außerhalb der Toleranz liegt, bitte bei minimaler Helligkeit, Kontrast und Farbsättigung prüfen, ob sie innerhalb der Toleranz ist.
<b>KANAL TRENNUNG</b>  1. Stereo – Signal empfangen Rechten Kanal mit 60% 1KHz modulation Linker ohne Modulation. 2. Oszilloskop an <b>TPB33</b> anklemmen	1. <b>R2204</b> so einstellen daß das Übersprechen vom rechten zum linken Kannal <b>TPB33</b> zum Minimum wird

## ADJUSTMENTS

<b>SUB CONTRAST</b>	<ol style="list-style-type: none"> <li>Receive a Colour Bar pattern. (Input level 75dB).</li> <li>Connect an oscilloscope to TPC15 (TPE15).</li> <li>Set controls to :           <table border="0"> <tr> <td>Brightness</td> <td>minimum</td> </tr> <tr> <td>Contrast</td> <td>maximum</td> </tr> <tr> <td>Sub colour (VR)</td> <td>minimum</td> </tr> <tr> <td>Sharpness</td> <td>minimum</td> </tr> </table> </li> <li>Connect a short jump wire between (TPC7) TPE7 and earth.</li> </ol>	Brightness	minimum	Contrast	maximum	Sub colour (VR)	minimum	Sharpness	minimum	<ol style="list-style-type: none"> <li>Adjust Sub brightness (R321) to set the black level to 0.2V.</li> <li>Adjust the Sub contrast (R317) to set the drive voltage to <math>2.8V \pm 0.1V_{op-p}</math>.</li> <li>Remove the earth from TPE7.</li> </ol> <p>Adjust R317 <math>2.8V \pm 0.1V_{op-p}</math></p> <p>0.2V</p> <p>Adjust R321 ↑</p>
Brightness	minimum									
Contrast	maximum									
Sub colour (VR)	minimum									
Sharpness	minimum									
<b>PAL APC</b>	<ol style="list-style-type: none"> <li>Receive a Philips pattern.</li> <li>Connect a short jumper between TPC76 and earth.</li> <li>Connect an oscilloscope to TPC15.</li> </ol>	<ol style="list-style-type: none"> <li>Adjust APC trimmer (C637) to obtain the waveform at TPC15 as shown in Fig.10.</li> <li>Remove the earth link and confirm the bars are stationery.</li> </ol> <p>Fig.10.</p>								
<b>SUB COLOUR</b>	<ol style="list-style-type: none"> <li>Receive a PAL colour bar pattern.</li> <li>Set controls to :           <table border="0"> <tr> <td>Brightness</td> <td>minimum</td> </tr> <tr> <td>Contrast</td> <td>maximum</td> </tr> <tr> <td>Colour</td> <td>centre</td> </tr> <tr> <td>Sharpness</td> <td>minimum</td> </tr> </table> </li> <li>Connect an oscilloscope to TPC15 (TPE15).</li> </ol>	Brightness	minimum	Contrast	maximum	Colour	centre	Sharpness	minimum	<ol style="list-style-type: none"> <li>Connect a short jumper between TPC6 and earth.</li> <li>Adjust the sub colour (R606) for <math>1.6V_{op-p} \pm 0.1V</math> at TPC15 (TPE15) as shown in Fig.11.</li> <li>Remove the earth jumper wire.</li> </ol> <p>1.6Vp-p +/- 0.1V</p> <p>Fig.11.</p>
Brightness	minimum									
Contrast	maximum									
Colour	centre									
Sharpness	minimum									
<b>TEXT CONTRAST</b>	<ol style="list-style-type: none"> <li>Receive a teletext signal.</li> <li>Connect an oscilloscope to H1 pin 6.</li> </ol> <p><b>NOTE:</b> If the H-board is disconnected from the E-board a <math>10K\Omega</math> resistor has to be connected between H1 pin 6 and earth.</p>	<ol style="list-style-type: none"> <li>Adjust R3514 to obtain the waveform as shown in Fig.12.</li> </ol> <p>0.6Vp-p +/- 0.02V</p> <p>0</p> <p>Fig.12.</p>								
<b>BELL FILTER</b>	<ol style="list-style-type: none"> <li>Receive a Phillips pattern (SECAM).</li> <li>Connect an oscilloscope to TPC69.</li> </ol>	<ol style="list-style-type: none"> <li>Adjust L600 to obtain the waveform as shown in Fig.13.</li> </ol> <p>NO GOOD</p> <p>GOOD</p> <p>NO GOOD</p> <p>Fig.13.</p>								

## IUSTIERUNGEN

### GRUNDKONTRAST

1. Empfang eines Farbbalken – Testbildes
2. Oszilloskop an Testpunkt **TPC15 (TPE15)**.
3. Die Regler wie folgt einstellen :
 

Helligkeit	minimum
Kontrast	maximum
Grundfarbsättigung	minimum
Bildscharfe	mittenstellung
4. **TPE7** auf Masse Klemmen.

1. Grundhelligkeit (**R321**) auf 0.2V einstellen.
2. Grundkontrast (**R317**) auf 2.8V  $\pm 0.1V_{o-s}$  einstellen.

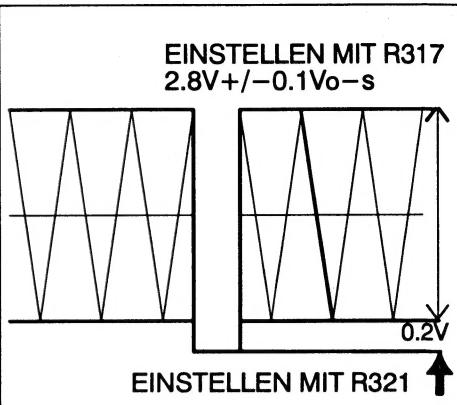


Abb.9.

### PAL APC

1. Empfang eines PAL – Farbbalken Testbildes.
2. **TPC76** auf Masse Klemmen.
3. Oszilloskop an **TPC15**.

1. Trimmer (**C637**) auf minimale Bewegung in den Farbbalken abgleichen
2. Brücken entfernen und korrekte Farbbalkenfolge überprüfen.

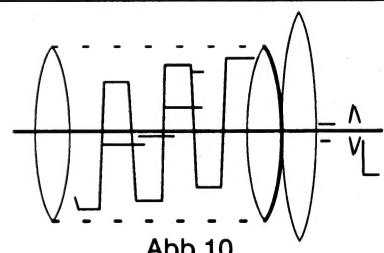


Abb.10.

### GRUNDFARBSÄTTIGUNG

Grundeinstellung Farbsättigung (Sub Colour).

- 1.. Farbbalkentestbild empfangen
2. Die Regler wie folgt einstellen
 

Helligkeit	minimum
Kontrast	maximum
Farbsättigung	mitte
Bildscharfe	minimum
3. Oszilloskop an **TPC15 (TPE15)**.

1. **TPC6** auf Masse Klemmen.
2. An **TPE15 mit R606 (SUB-COL)**  $1.6V_{ss} \pm 0.1V$  at **TPC15 (TPE15)**.
3. Die Kurzschlussbrücke entfernen.

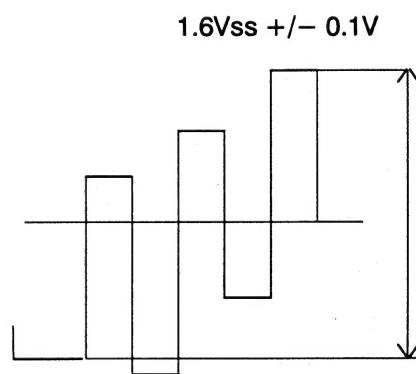


Abb.11.

### VIDEOTEXT-KONTRAST

1. Videotext signal empfangen
2. Oszilloskop an **H1 pin 6**.

1. Mit **R3514** die Signalform nach Abb.12. einstellen.  
**Hinweis:**  
Wenn H1 nicht mit der E-Plantine verbunden ist, muß ein  $10\text{ k}\Omega$  Widerstand zwischen **H1 pin 6** und Masse eingebaut werden.

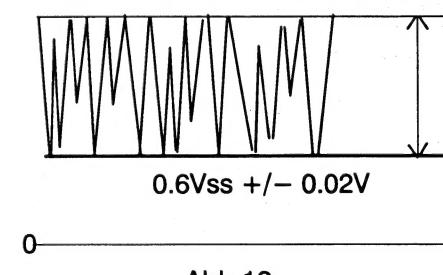


Abb.12.

### GLOCKENFILTER

- 1 Ein Philip-Muster empfangen (SECAM)
- 2 Oszilloskop an Testpunkt **TPC69**

- 1 Mit **L600** die Signalform nach Abb.13. einstellen

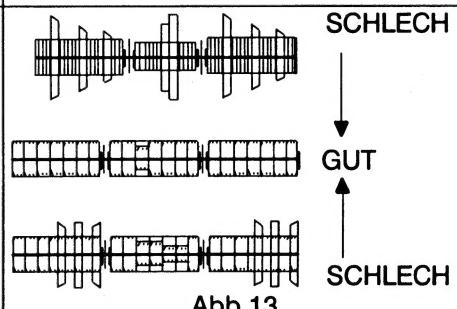


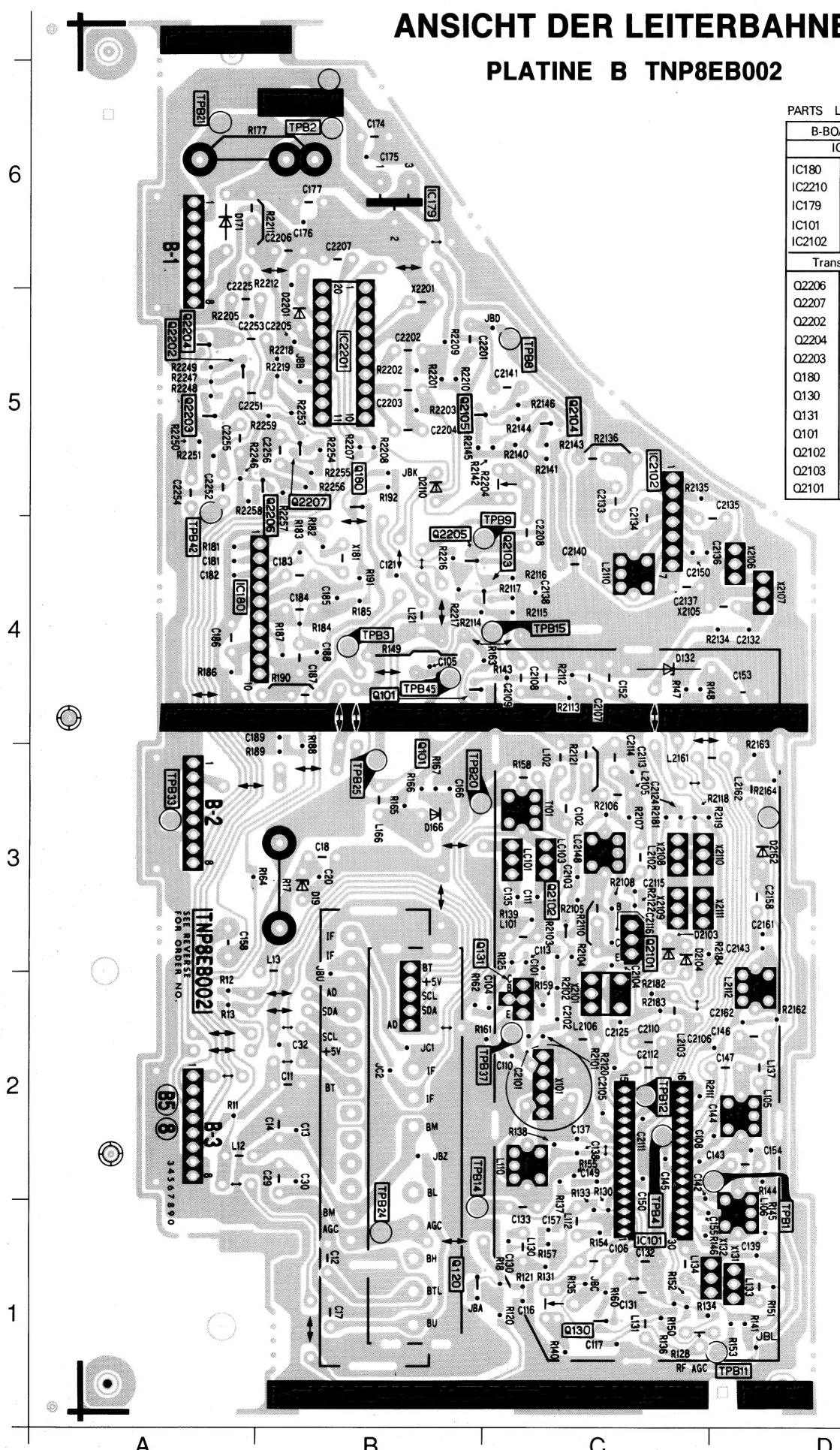
Abb.13.

# CONDUCTOR VIEWS

**B-BOARD TNP8EB002**

## **ANSICHT DER LEITERBAHNEN**

**PLATINE B TNP8EB002**

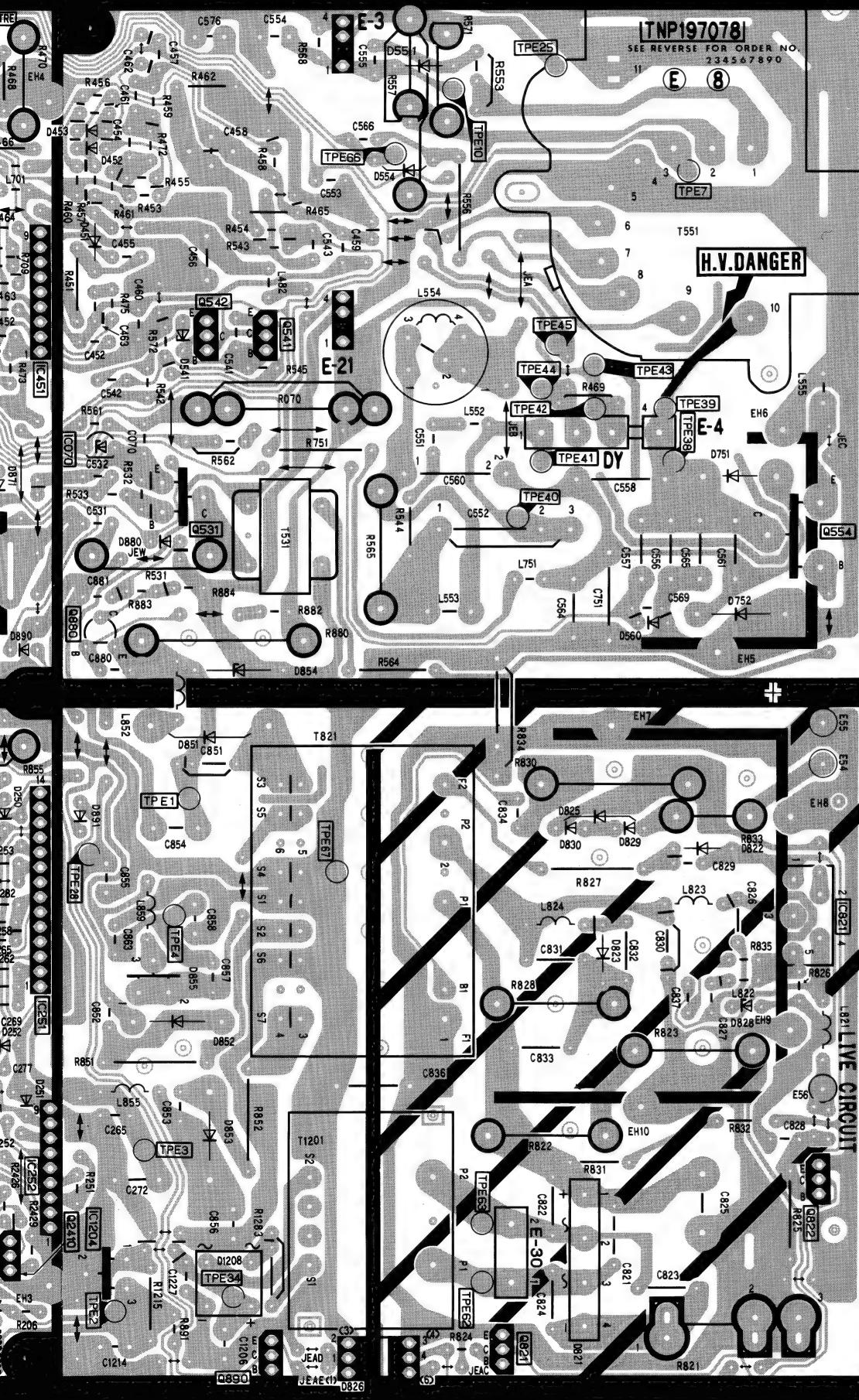


PARTS LOCATION	
B-BOARD	
IC	
IC180	A4
IC2210	A5
IC179	B6
IC101	C2
IC2102	C4
Transistor	
Q2206	A4
Q2207	A4
Q2202	A5
Q2204	A5
Q2203	A5
Q180	A5
Q130	B1
Q131	B2
Q101	B3
Q2102	B3
Q2103	B4
Q2101	C3

B-BOARD	
Diode	
D19	A3
D2201	A5
D171	A6
D166	B3
D2210	B5
D2103	C3
D2104	C3
D132	C4
D2162	C4
Test Points	
TPB33	A3
TPB24	A4
TPB3	A4
TPB2	A6
TPB21	A6
TPB24	B1
TPB37	B2
TPB20	B3
TPH25	B3
TPB45	B4
TPB9	B4
TPB8	B5
TPB14	B5
TPB11	C1
TPB12	C2
TPB4	C2
TPB1	C2

## **ANSICHT DER LEITERBAHNEN**

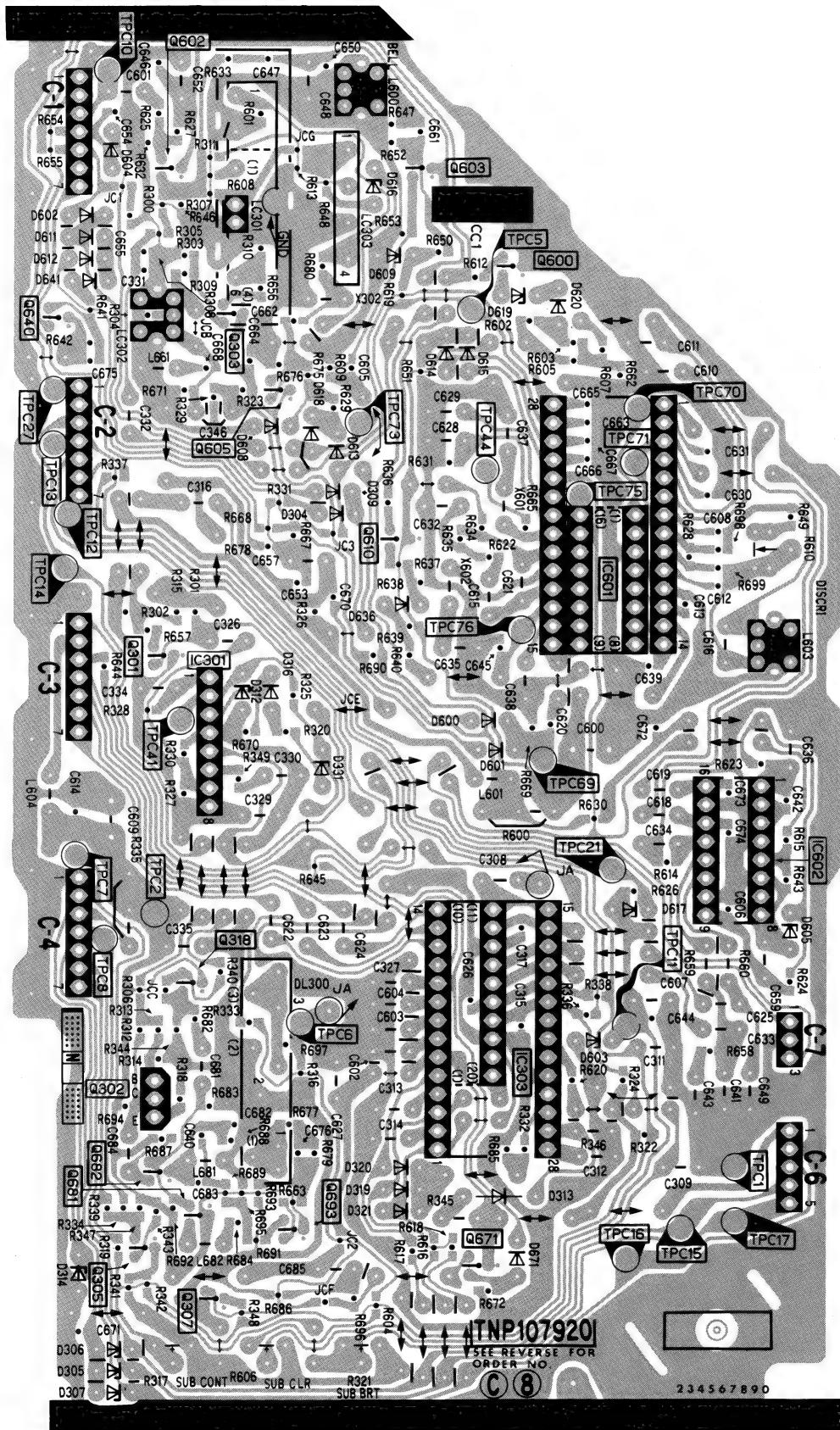
**PLATINE E TNP197078**



PARTS		LOCATION	E-BOARD		E-BOARD	
E-BOARD		IC	Diode		Diode	
IC2402	A2	D204	A1	D2405	B2	
IC3301	B5	D1310	B2	D2406	B2	
IC1212	C1	D1311	B3	D3307	B4	
IC1213	C2	D3163	B3	D3301	B5	
IC3302	C5	D3308	B3	D504	D4	
IC1202	D2	D3162	B4	D409	D5	
IC501	D6	D1255	B4	D502	C5	
IC251	E3	D3307	B4	D1225	D1	
IC701	E5	D3302	B5	D1250	D2	
IC451	E5	D3303	B5	D533	D3	
IC1204	F1	D3304	B5	D1232	D3	
IC070	F5	D3305	B5	D3309	D4	
IC821	I3	D3306	B5	D512	D6	
Transistor		D1255	B5	D511	D7	
Q2405	A3	D502	C5	D209	E1	
Q2406	A3	D502	C5	D870	E4	
Q3304	A5	D207	D2	D541	F5	
Q3165	A3	D210	D2	D828	H2	
Q3166	A3	D1208	D2	Test Points		
Q8561	A6	D1235	D3	TPE54	A6	
Q3164	A6	D3313	D3	TPE51	B6	
Q3168	B3	D1232	D3	TPE36	C1	
Q1202	B3	D1231	D3	TPE52	C6	
Q1203	B3	D1243	D4	TPE50	C6	
Q3301	B4	D3310	D4	TPE8	D5	
Q3302	B4	D534	D4	TPE15	D5	
Q3163	B4	D3311	D4	TPE16	D5	
Q250	B4	D501	D5	TPE17	D5	
Q3167	B5	D505	D5	TPE24	D6	
Q3303	B5	D409	D5	TPE29	E2	
Q3162	B6	D402	D6	TPE30	E3	
Q3167	B6	D201	E1	TPE5	E5	
Q3330	C4	D206	E1	TPE9	E9	
Q3331	C4	D3176	E1	TPE34	F1	
Q1256	C4	D250	E3	TPE2	F1	
Q3330	C4	D503	E4	TPE3	F2	
Q3331	C4	D890	E4	TPE4	F3	
Q3332	C4	D871	E5	TPE28	F3	
Q1255	C4	D1253	E5	TPE1	F3	
Q503	C5	D552	E5	TPE62	G1	
Q532	C5	D702	E5	TPE63	G1	
Q532	C5	D701	E6	TPE67	G3	
Q503	C5	D852	F2	TPE40	G4	
Q3159	C6	D853	F2	TPE41	G5	
Q3161	C6	D855	F2	TPE44	G5	
		D851	F3	TPE45	G5	
		D891	F3	TPE66	G6	
		D880	F4	TPE10	G6	
		D854	F4	TPE25	G6	
		D451	F6	TPE38	H5	
		D826	G1	TPE39	H5	
		D551	G6	TPE42	H5	
		D554	G6	TPE43	H5	
		D821	H1			
		D822	H3			
		D823	H3			
		D825	H3			
		D752	H4			
		D560	H4			
		D751	H5			

C-BOARD TNP107920

**PLATINE C TNP107920**



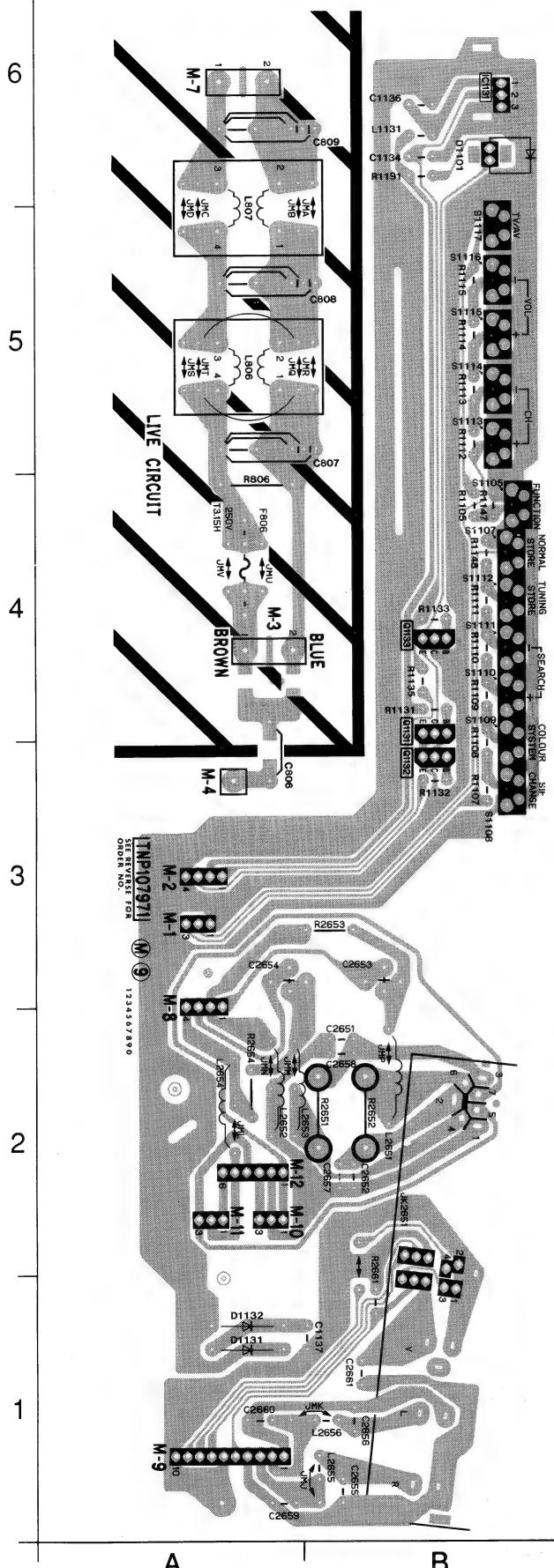
PARTS LOCATION	
C-BOARD	
IC	
IC601	B5
IC301	B3
IC303	C2
IC602	D3
Transistor	
Q305	A1
Q682	A2
Q681	B1
Q307	B1
Q693	B1
Q318	B2
Q302	B2
Q605	B4
Q303	B5
Q602	B6
Q671	C1
Diode	
D305	A1
D306	A1
D307	A1
D314	A1
D321	B1
D319	B2
D320	B2
D316	B3
D331	B3
D304	B4
D309	B4
D313	C1
D671	C1
D600	C3
D601	C3
D617	C3
D605	D2
C-BOARD	
Test Points	
TPC2	A3
TPC6	A2
TPC8	A2
TPC7	A3
TPC10	A6
TPC14	A4
TPC13	A4
TPC27	A5
TPC41	B3
TPC73	B4
TPC5	C5
TPC16	C1
TPC21	C3
TPC44	C4
TPC69	C3
TPC70	C5
TPC75	C4
TPC76	C4
TPC1	D2
TPC15	D1
TPC17	D1

M-BOARD TNP107971

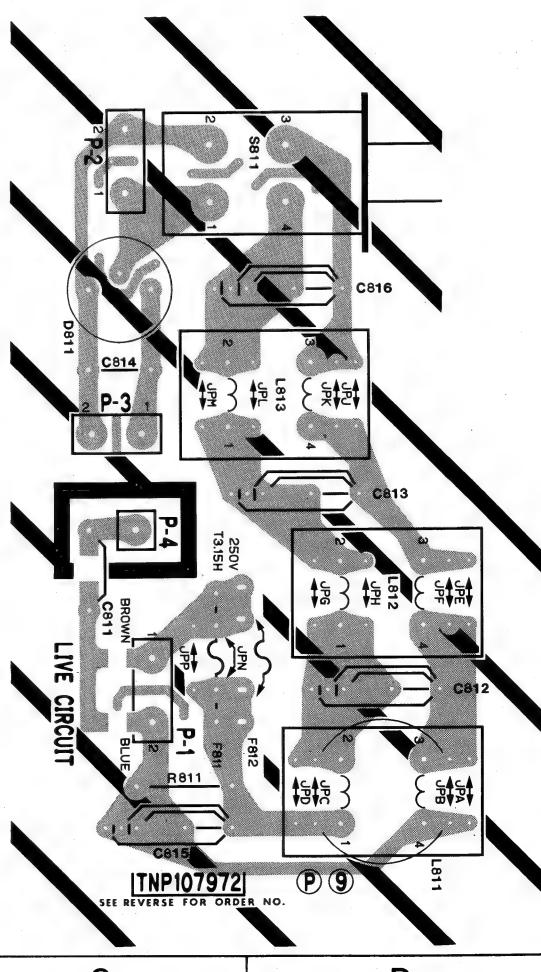
**PLATINE M TNP107971**

P-BOARD TNP107972

**PLATINE P TNP107972**



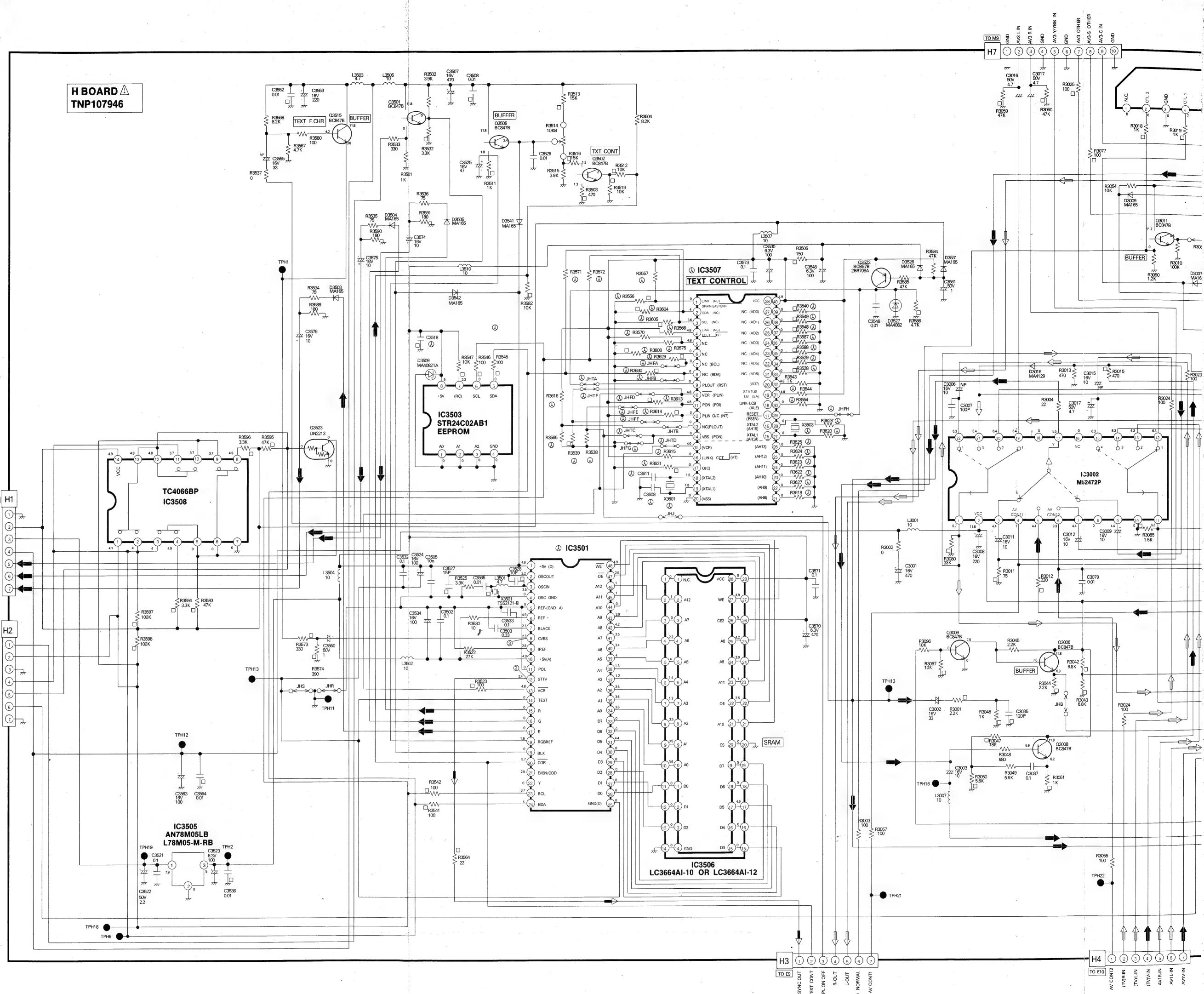
PARTS	LOCATION
M-BOARD	
Transistor	
Q1132	B3
Q1131	B4
Q1133	B4
Diodes	
D1131	A1
D1132	A1



PARTS LOCATION	
P-BOARD	
Diodes	
D811	C3

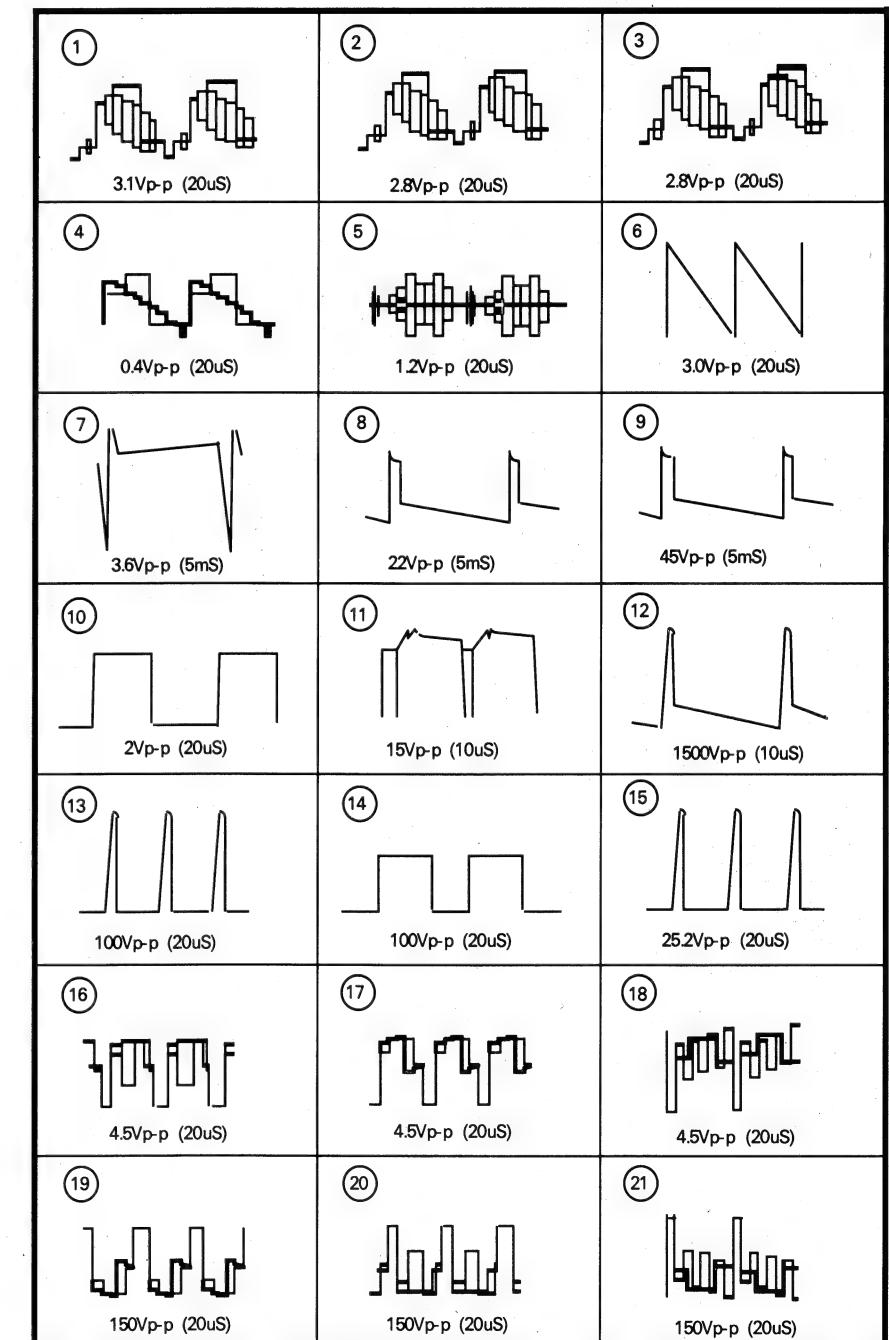
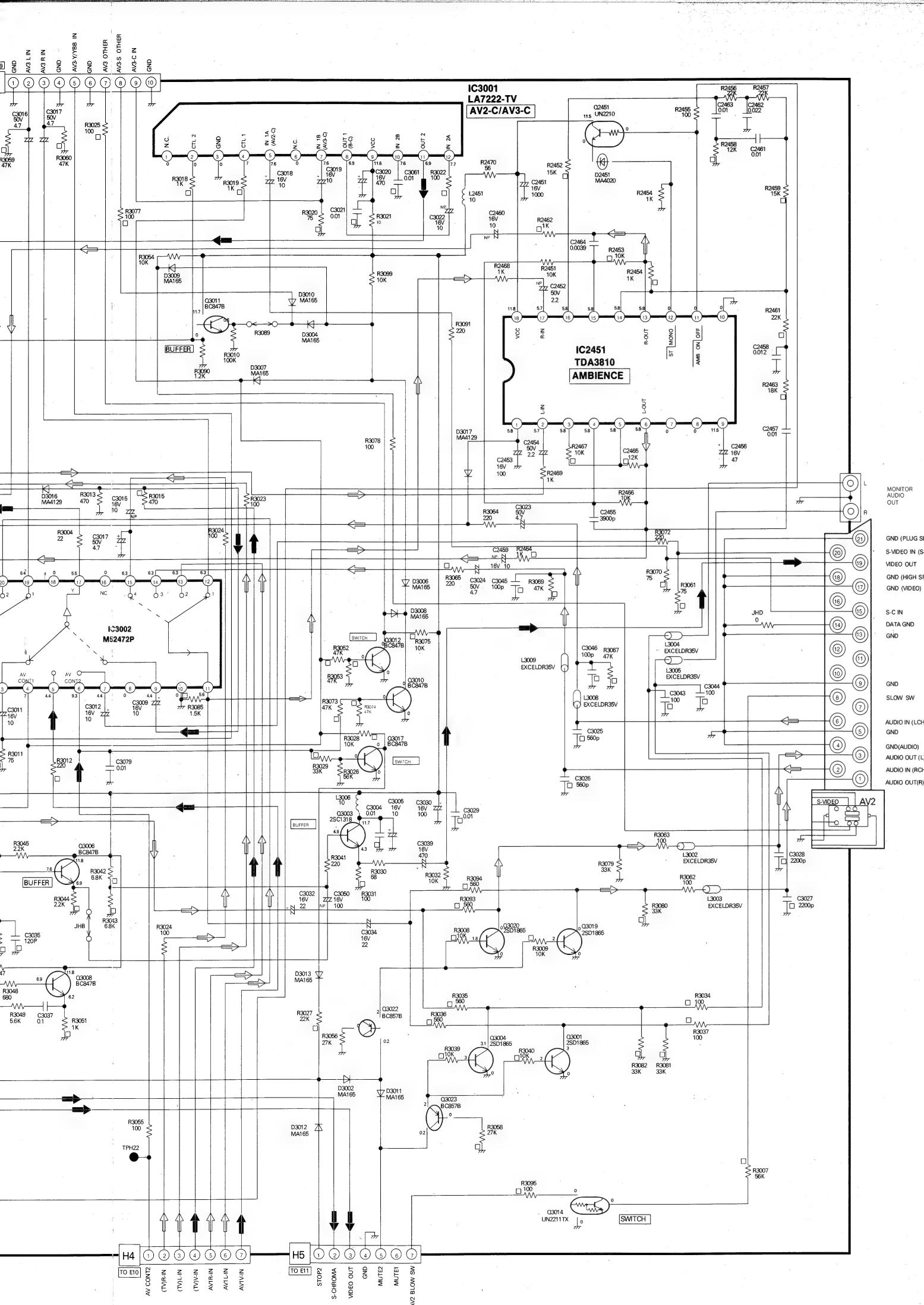


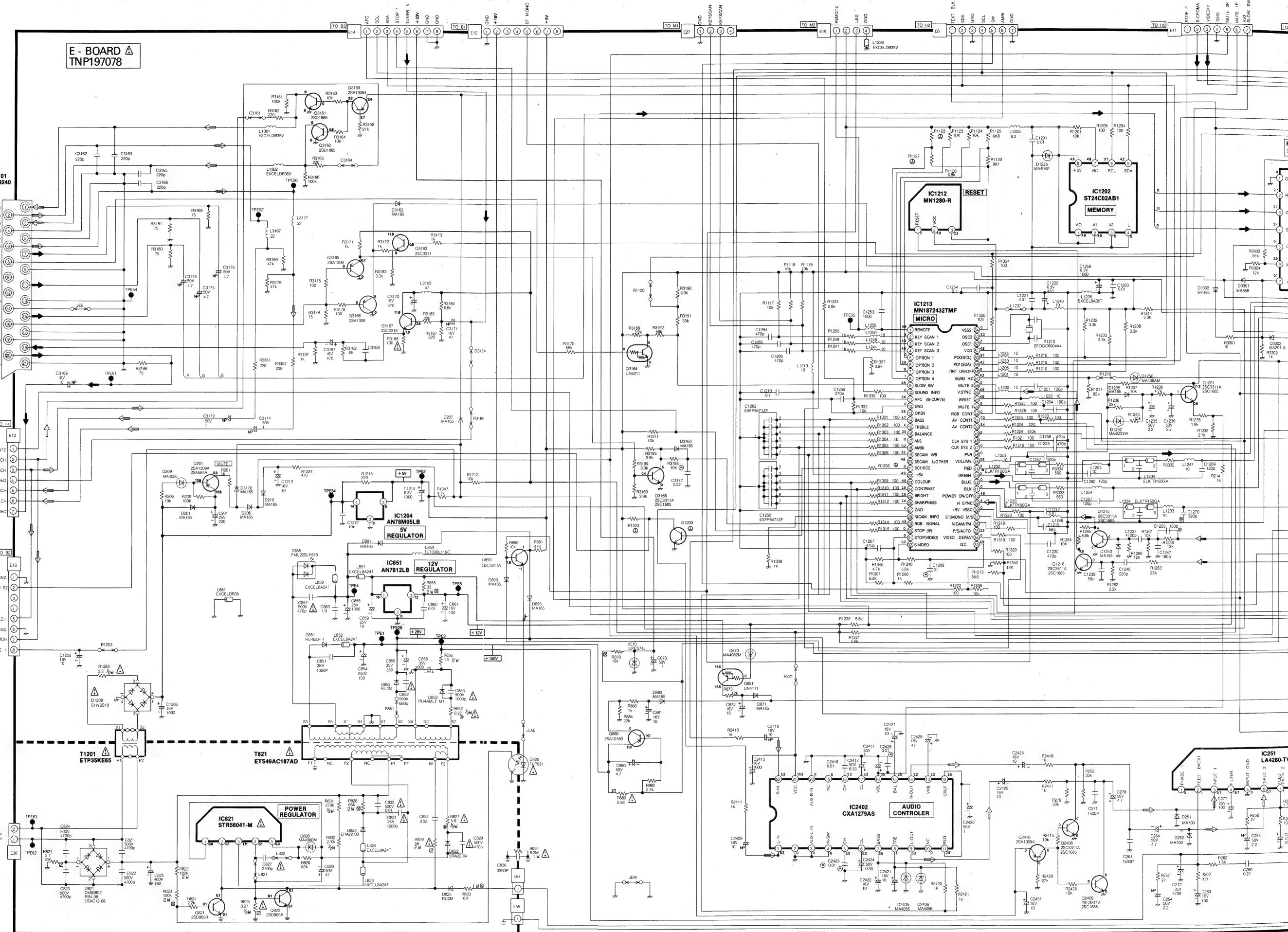
DIFFERENCE LIST	
C.R.	X1C X1CP
C3518	10nF 1pF
C3608	18pF DELETE
C3611	18pF DELETE
IC3501	SAA5246APM6 SAA5246APHM6
IC3507	PCB83054028 PCFB4C81P076
JHFA	DELETE S.M. Jumper
JHFB	DELETE S.M. Jumper
JHFU	DELETE S.M. Jumper
JHFE	DELETE S.M. Jumper
JHFF	DELETE S.M. Jumper
JHFG	DELETE S.M. Jumper
JHFH	DELETE S.M. Jumper
JHTA	S.M. Jumper DELETE
JHTC	S.M. Jumper DELETE
JHTD	S.M. Jumper DELETE
JHTF	S.M. Jumper DELETE
R3528	1K S.M. Jumper
R3529	1K S.M. Jumper
R3538	10K DELETE
R3539	S.M. Jumper 100 Ohm
R3540	1K S.M. Jumper
R3544	1K 10K
R3548	1K S.M. Jumper
R3549	1K S.M. Jumper
R3554	DELETE 100 Ohm
R3556	1K DELETE
R3557	DELETE 1K
R3565	1K S.M. Jumper
R3566	1K 10K
R3570	DELETE 10K
R3571	DELETE 100 Ohm
R3572	DELETE 100 Ohm
R3575	1K DELETE
R3587	1K S.M. Jumper
R3588	1K S.M. Jumper
R3604	1K DELETE
R3605	1K DELETE
R3608	1K S.M. Jumper
R3613	1K DELETE
R3614	1K DELETE
R3615	1K DELETE
R3616	1K DELETE
R3618	1K DELETE
R3620	1K DELETE
R3621	1K DELETE
R3622	1K DELETE
R3623	1K DELETE
R3624	1K DELETE
R3625	1K DELETE
R3627	1K DELETE
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R3629	1K DELETE
R3630	1K DELETE
X3503	DELETE TSS2001-N1
X3801	DELETE TSS2000MX

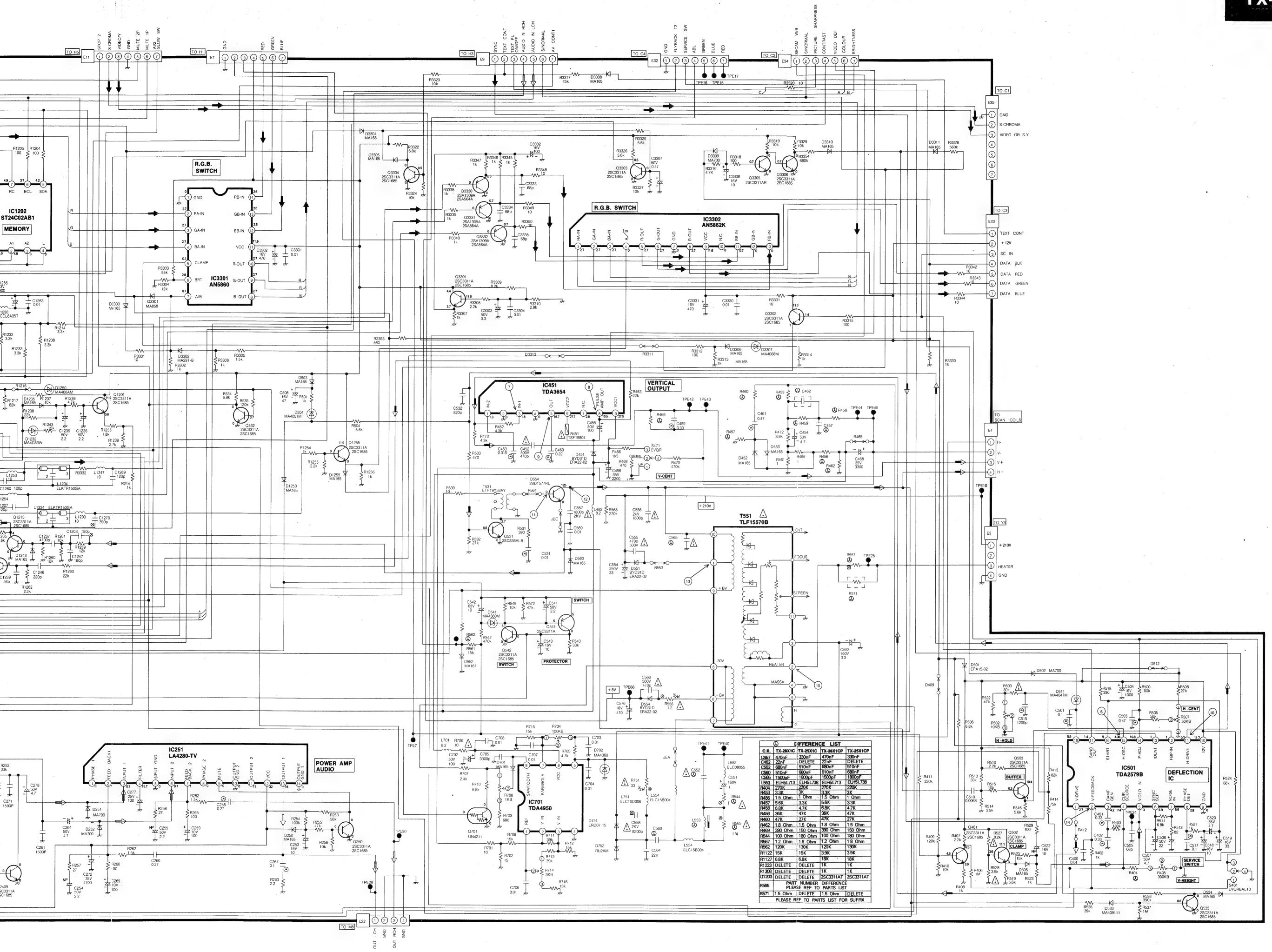


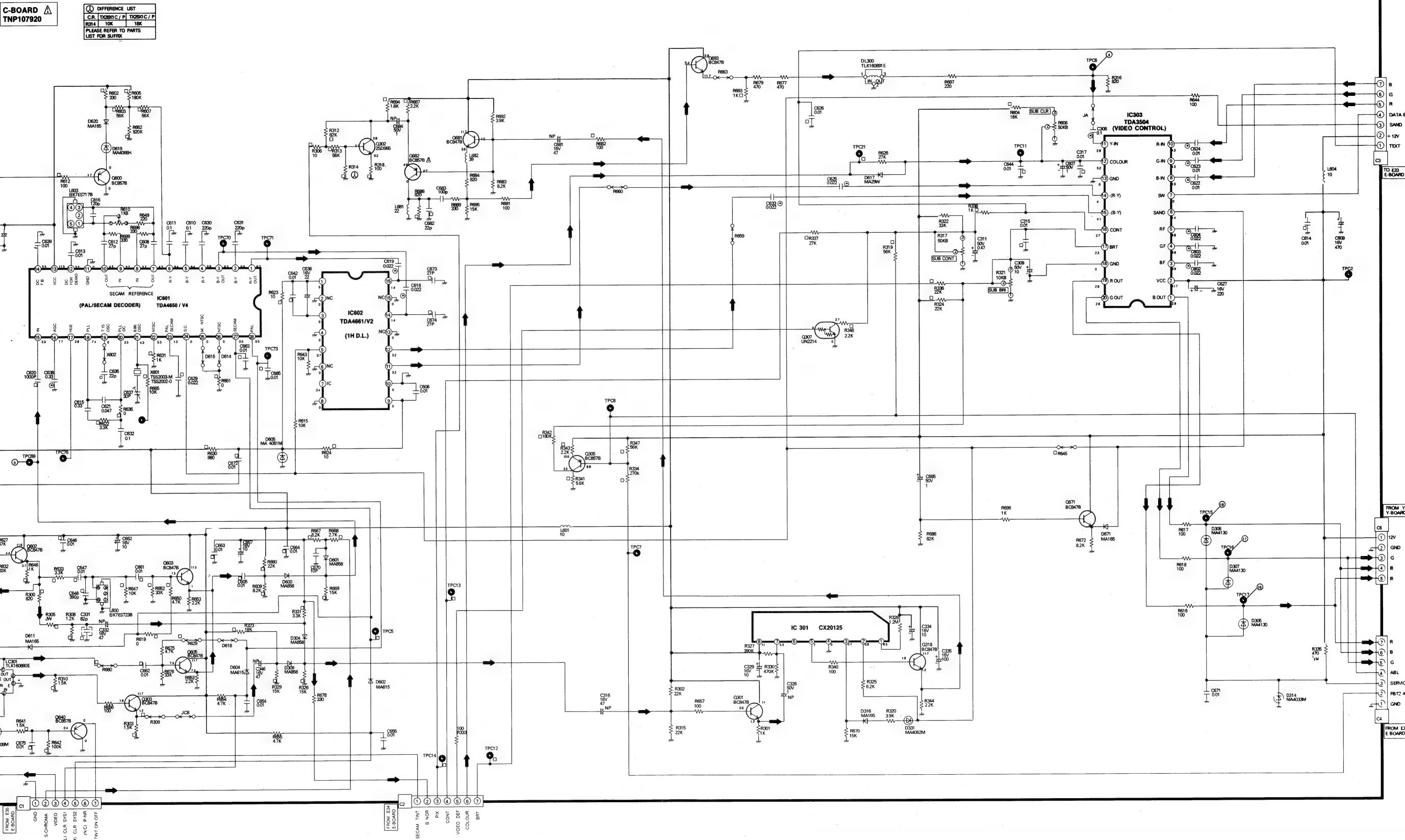
# **WAVEFORM PATTERN TABLE**

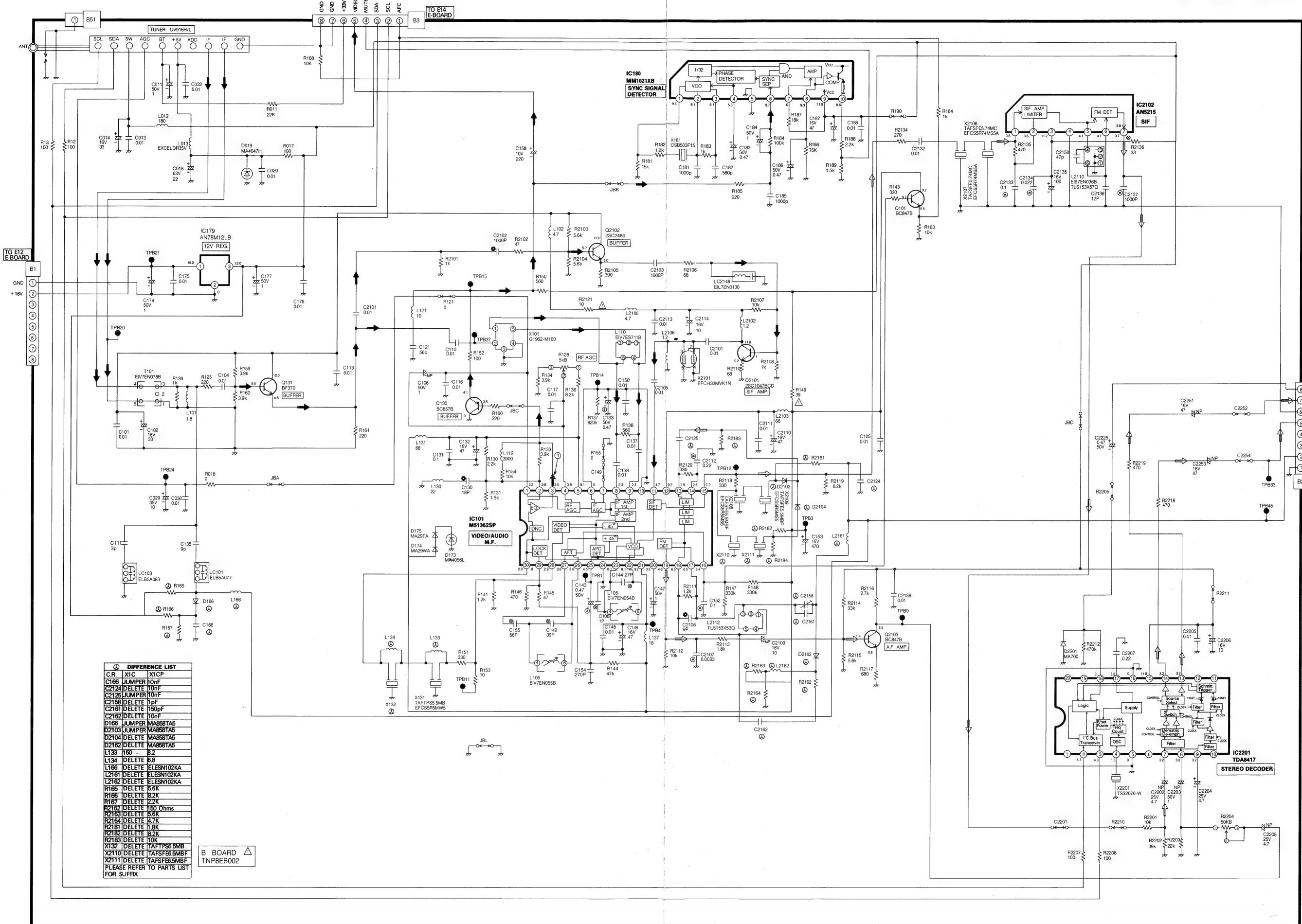
# **SIGNAL TABELLE**

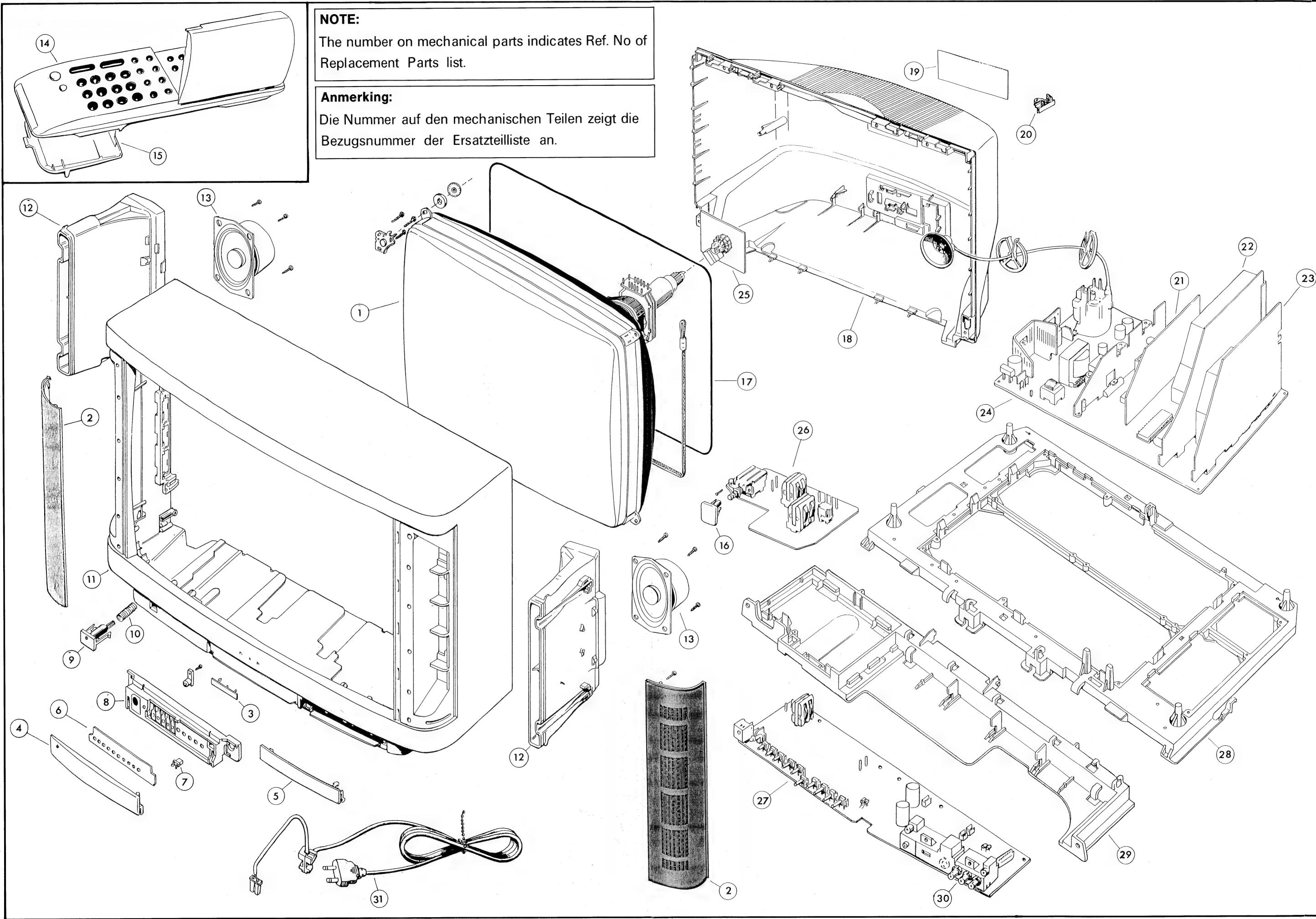


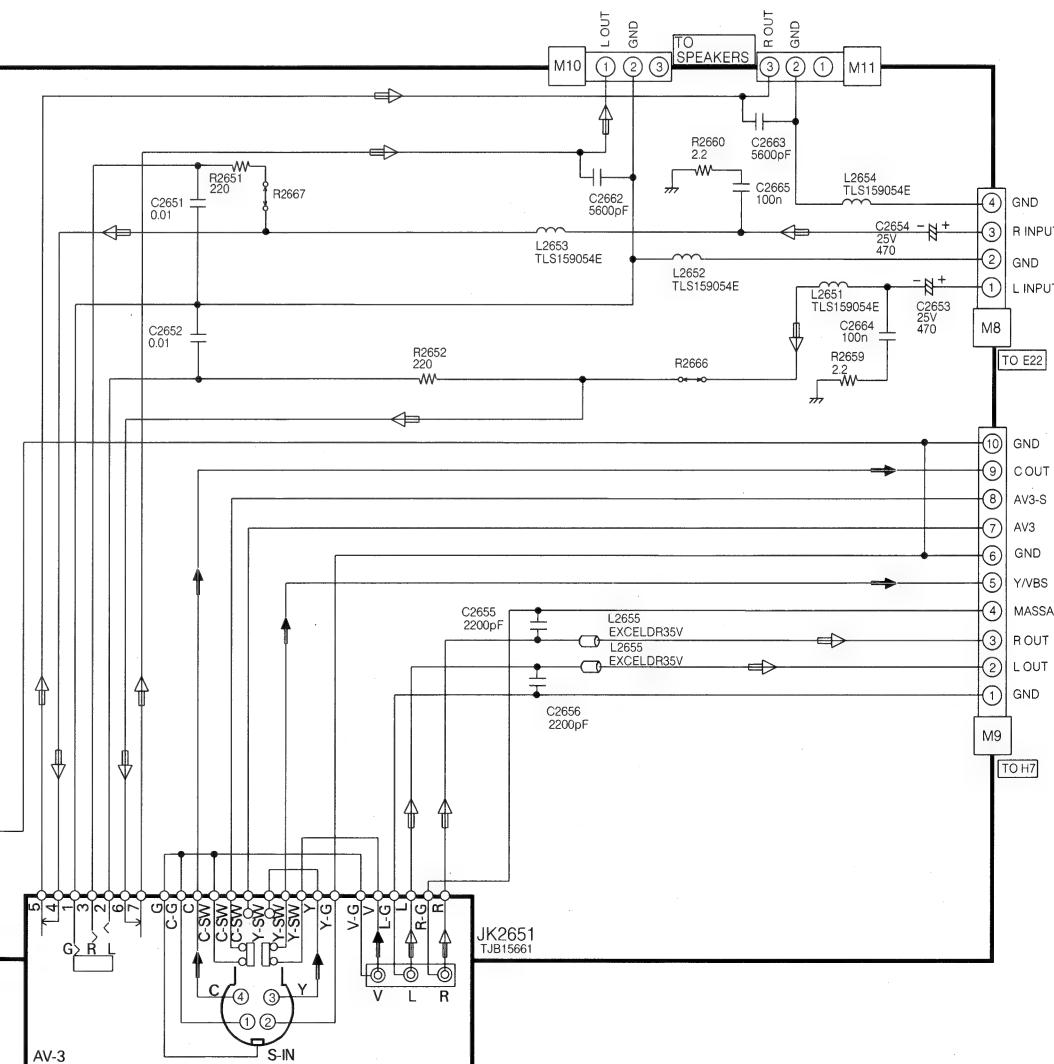
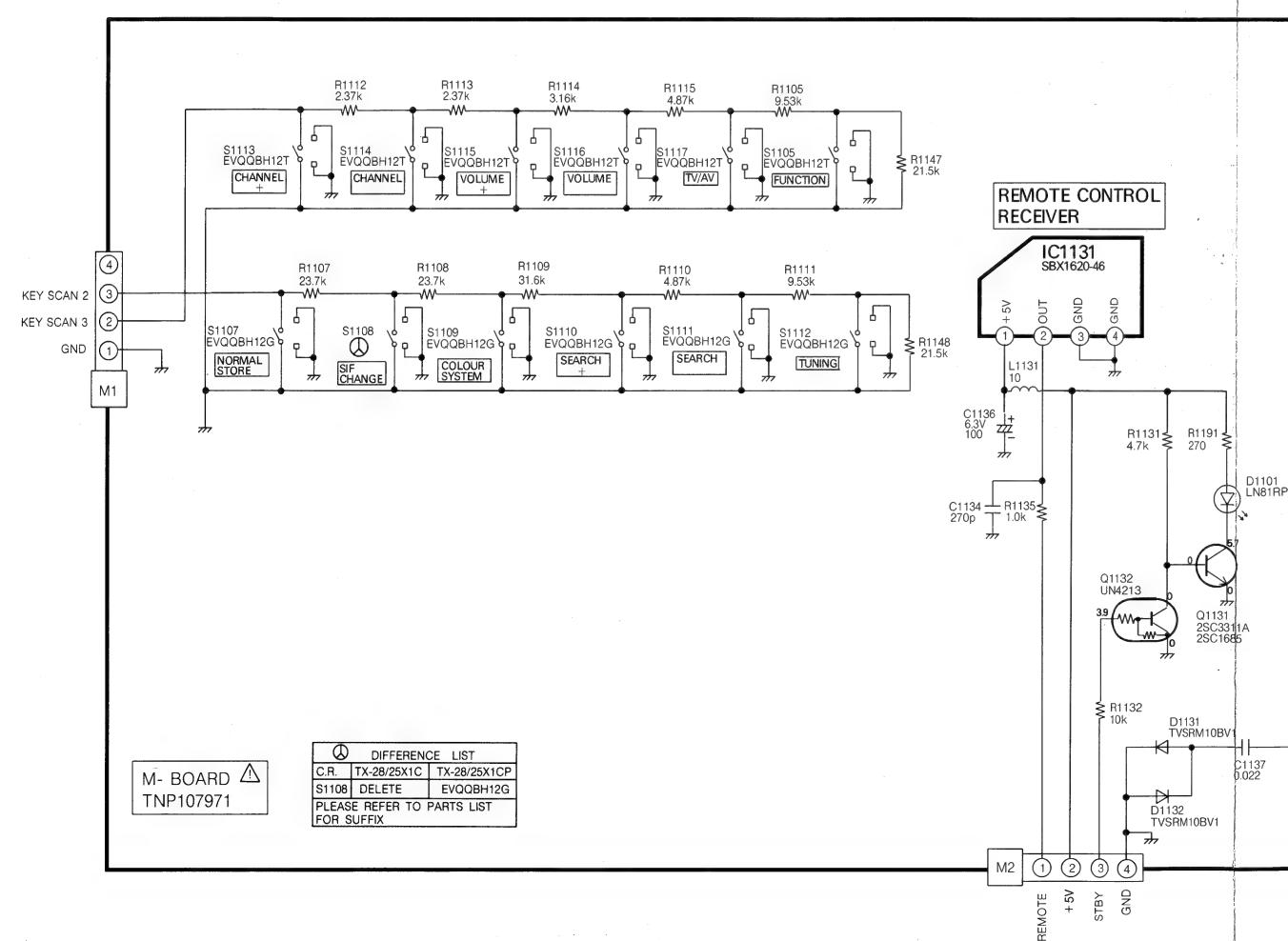
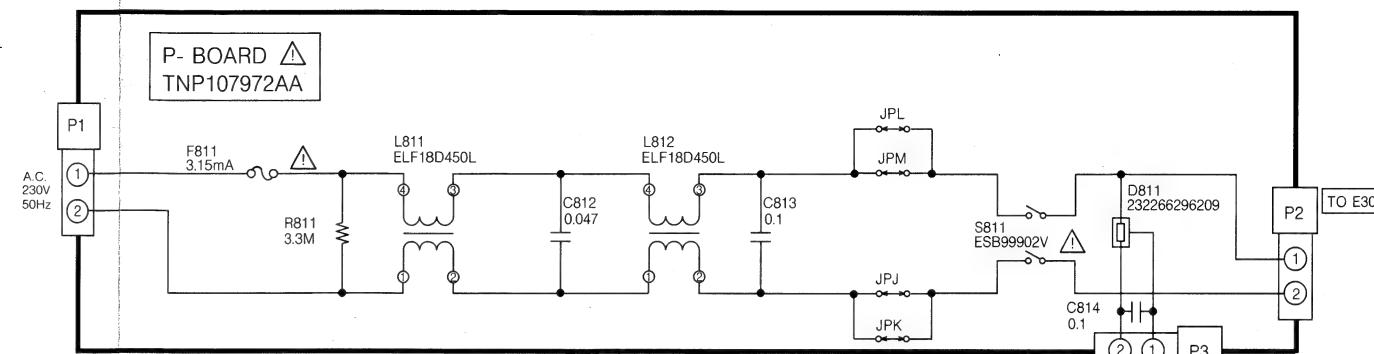
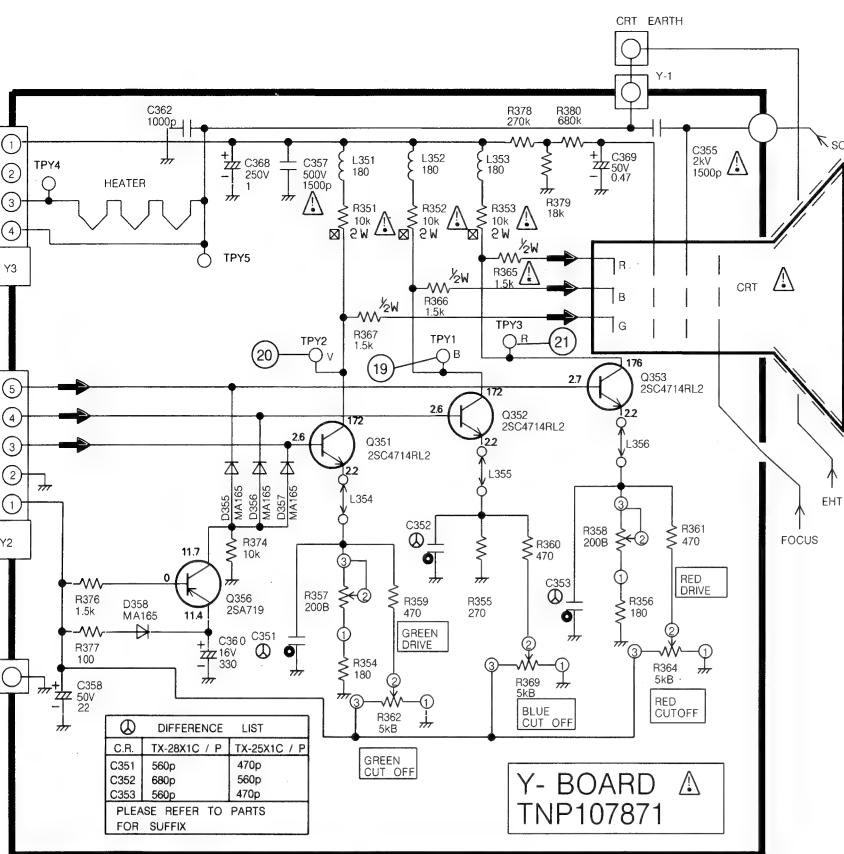












## REPLACEMENT PARTS LIST

### Important Safety Notice

Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Ref No.	Part No.	Description
<b>MISCELLANEOUS COMPONENTS</b>		
1)	A66EDN43X38	C.R.T $\Delta$
2)	TKP1813021-1	SPEAKER PANEL (RIGHT)
	TKP1813031-1	SPEAKER PANEL (LEFT)
3)	TBM153010	PANASONIC BADGE
4)	TKP1813001	DOOR
5)	TKP1812282	AV DOOR
6)	TBM170615	INDICATION SHEET
7)	TEK6935	LID SWITCH
8)	TKP1812991	CONTROL PANEL
9)	TBX2883901	POWER BUTTON
10)	TES2268	SPRING
11)	TKY188103	CABINET $\Delta$
12/13)	EAG1207CG	SPEAKER
14)	TNQ8E0454	REMOTE CONTROL
15)	UR51EC749	BATTERY COVER
16)	TKK188514	BUTTON SPACER
17)	TLK259096N	DECAUSS COIL
18)	TKU320103	REAR COVER $\Delta$
19)	TBM8E1291-1	REAR COVER LABEL
20)	TKR27801	REAR COVER FIXING CLIP
21)	TNP107920AM	C. P.C.B. $\Delta$
22)	TNP8EB002AE	B. P.C.B. $\Delta$
23)	TNP107946AK	H P.C.B. $\Delta$
24)	TNP197078AP	E P.C.B. $\Delta$
25)	TNP107871AL	Y P.C.B. $\Delta$
26)	TNP107972AA	P. P.C.B. $\Delta$
27)	TNP107971AC	M. P.C.B. $\Delta$
28)	TMX17134-1	E - BOARD CHASSIS BRACKET
29)	TMW27188-1	M/P - BOARD CHASSIS BRACKET
30)	TJB15661	A.V. TERMINAL BLOCK (FRONT)
31)	TSX8E0011	MAINS LEAD $\Delta$
	TQB8E0780	INSTRUCTION BOOK $\Delta$
TNR1	UV916H-L	TUNER $\Delta$
	TPC8E4405	OUTER CARTON
	TPD191574-1	TOP CUSHION
	TPD192569-1	BOTTOM CUSHION
	TKZ179228-1	C.R.T. FIXING METAL
	TKP17A0101	SMOKED PANEL
	TJB18615	AV2 BRACKET
	TJS8E003	SCART SOCKET
	TKP1813011	LED HOLDER
	EYF52BC	FUSE HOLDER $\Delta$
	F9-4-220	RELAY $\Delta$
F811	2153.15H	FUSE $\Delta$
<b>DIFFERENCE LIST FOR TX-25X1C</b>		
<b>MISCELLANEOUS COMPONENTS</b>		
1)	A59JMZ143X02	C.R.T $\Delta$
2)	TKP1812971-1	SPEAKER PANEL (RIGHT)
	TKP1812981-1	SPEAKER PANEL (LEFT)
11)	TKY188503	CABINET $\Delta$
18)	TKU321102	REAR COVER $\Delta$
19)	TBM8E1287-1	REAR COVER LABEL
21)	TNP107920AH	C. P.C.B. $\Delta$
24)	TNP197078AN	E P.C.B. $\Delta$
25)	TNP107871AK	Y P.C.B. $\Delta$
	TPC8E4390	OUTER CARTON
	TPD8E536-1	TOP CUSHION
	TPD8E537-1	BOTTOM CUSHION

## ERSATZTEILLISTE

### Wichtiger Sicherheitshinweis

Teile, die mit einem Hinweis  $\Delta$  gekennzeichnet sind, sind wichtig für die Sicherheit. Solite ein Auswechseln erforderlich sein, sind unbedingt Originalteile einzusetzen.

Ref No.	Part No.	Description
<b>NOTE: DIFFERENCE LIST SHOWN BELOW IS FOR CP MODELS ONLY</b>		
<b>DIFFERENCE LIST FOR TX-25/28X1CP</b>		
<b>MISCELLANEOUS COMPONENTS</b>		
19)	TBM8E1326-1	REAR COVER LABEL (TX-28X1CP)
19)	TBM8E1325	REAR COVER LABEL (TX-25X1CP)
22)	TNP8EB002AF	B. P.C.B. $\Delta$
23)	TNP107946AL	H P.C.B. $\Delta$
24)	TNP197078AX	E P.C.B. $\Delta$ (TX-28X1CP)
24)	TNP197078AW	E. P.C.B. $\Delta$ (TX-25X1CP)
27)	TNP107971AE	M. P.C.B. $\Delta$
	TPC8E4405	OUTER CARTON (TX-28X1CP)
	TPC8E4390	OUTER CARTON (TX-25X1CP)
	TQA8E1115	SCHEMATIC DIAGRAM
	TQB8E0812	INSTRUCTION BOOK
<b>WIRE LINKS</b>		
JBA.K	ERJ6GMY0R00	S.M. WIRE LINK
JBC.K	ERJ6GMY0R00	S.M. WIRE LINK
JBD.K	ERJ6GMY0R00	S.M. WIRE LINK
JBK.K	ERJ6GMY0R00	S.M. WIRE LINK
JBL.K	ERJ6GMY0R00	S.M. WIRE LINK
JHD.K	ERJ6GMY0R00	S.M. WIRE LINK
JHR.K	ERJ6GMY0R00	S.M. WIRE LINK
JHS.K	ERJ6GMY0R00	S.M. WIRE LINK
JHTA.K	ERJ6GMY0R00	S.M. WIRE LINK
JHTB.K	ERJ6GMY0R00	S.M. WIRE LINK
JHTC.K	ERJ6GMY0R00	S.M. WIRE LINK
JHTD.K	ERJ6GMY0R00	S.M. WIRE LINK
JHTF.K	ERJ6GMY0R00	S.M. WIRE LINK
<b>CAPACITORS</b>		
C11	ECEA1HFS010	ELECT 50V 1 $\mu$ F
C13	ECUV1H103ZFX	S.M. CAP 50V 10nF
C14	ECEA1CU330	ELECT 16V 33 $\mu$ F
C18	ECEA1JU22	ELECT 63V 22 $\mu$ F
C20	ECUV1H103ZFX	S.M. CAP 50V 10nF
C29	ECEA1VFS100	ELECT 35V 10 $\mu$ F
C30	ECUV1H103ZFX	S.M. CAP 50V 10nF
C32	ECUV1H103ZFX	S.M. CAP 50V 10nF
C070	ECEA1HGE010	ELECT 50V 1 $\mu$ F
C101	ECUV1H103ZFX	S.M. CAP 50V 10nF
C102	ECEA1CU330	ELECT 16V 33 $\mu$ F
C104	ECUV1H103ZFX	S.M. CAP 50V 10nF
C105	ECUV1H103ZFX	S.M. CAP 50V 10nF
C106	ECEA1HN010	ELECT 50V 1 $\mu$ F
C108	ECUV1H010CCX	S.M. CAP 50V 1pF
C110	ECUV1H103ZFX	S.M. CAP 50V 10nF
C111	ECUV1H030CCX	S.M. CAP 50V 3pF
C113	ECUV1H103ZFX	S.M. CAP 50V 10nF
C116	ECUV1H103ZFX	S.M. CAP 50V 10nF
C117	ECUV1H103ZFX	S.M. CAP 50V 10nF

**TX-28X1C/TX25X1C  
TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description	
C121	ECUV1H560JPX	S.M. CAP	50V 56pF
C130	ECUV1H180JX	S.M. CAP	50V 18pF
C131	ECQM1H104J	FILM	50V 100nF
C132	ECEA1CU470	ELECT	16V 47μF
C133	ECEA1HFSR47	ELECT	50V .47μF
C135	ECUV1H090DCX	S.M. CAP	50V 9pF
C137	ECUVIH103ZFX	S.M. CAP	50V 10nF
C138	ECUVIH103ZFX	S.M. CAP	50V 10nF
C142	ECUV1H390JSX	S.M. CAP	50V 39pF
C143	ECEA1HFSR47	ELECT	50V .47μF
C144	ECUV1H270JPX	S.M. CAP	50V 27pF
C145	ECUVIH103ZFX	S.M. CAP	50V 10nF
C146	ECEA1CU470	ELECT	16V 47μF
C147	ECEA1HU010	ELECT	50V 1μF
C150	ECUVIH103ZFX	S.M. CAP	50V 10nF
C152	ECQM1H104J	FILM	50V 100nF
C153	ECEA1CU471	ELECT	16V 470μF
C154	ECUV1H271KBX	S.M. CAP	50V 270pF
C155	ECUV1H560JPX	S.M. CAP	50V 56pF
C158	ECEA1AU221	ELECT	10V 220μF
C174	ECEA1HU010	ELECT	50V 1μF
C175	ECUVIH103ZFX	S.M. CAP	50V 10nF
C176	ECUVIH103ZFX	S.M. CAP	50V 10nF
C177	ECEA1HU010	ELECT	50V 1μF
C181	ECUV1H102KBX	S.M. CAP	50V 1nF
C182	ECUV1H561KBX	S.M. CAP	50V 560pF
C183	ECEA1HFSR47	ELECT	50V .47μF
C184	ECEA1HU010	ELECT	50V 1μF
C185	ECUV1H102KBX	S.M. CAP	50V 1nF
C186	ECEA1HFSR47	ELECT	50V .47μF
C187	ECEA1CU470	ELECT	16V 47μF
C188	ECUVIH103ZFX	S.M. CAP	50V 10nF
C201	ECEA1EU221	ELECT	25V 220μF
C253	ECEA1CU100	ELECT	16V .10μF
C254	ECEA1HN2R2	ELECT	50V 2.2μF
C255	ECEA1HN2R2	ELECT	50V 2.2μF
C258	ECQM1H274J	FILM	50V 270nF
C259	ECEA1AU101	ELECT	10V 100μF
C260	ECQM1H274J	FILM	50V 270nF
C261	ECQB1H152K	FILM	50V 1.5nF
C264	ECEA1HU4R7	ELECT	50V 4.7μF
C269	ECEA1AU101	ELECT	10V 100μF
C271	ECQB1H152K	FILM	50V 1.5nF
C272	ECEA1VGE472	ELECT	35V 4700μF
C277	ECEA1EU101	ELECT	25V 100μF
C278	ECEA1HU4R7	ELECT	50V 4.7μF
C308	ECQM1H104J	FILM	50V 100nF
C309	ECEA1HU100	ELECT	50V 10μF
C311	ECEA1HUR47	ELECT	50V 0.47μF
C315	ECUVIH103ZFX	S.M. CAP	50V 10nF
C316	ECEA1CN470	ELECT	16V 47μF
C317	ECUVIH103ZFX	S.M. CAP	50V 10nF
C326	ECEA1HN010	ELECT	50V 1μF
C329	ECEA1CU100	ELECT	16V 10μF
C331	ECUV1H820JCX	S.M. CAP	50V 82pF
C332	ECEA1CN470	ELECT	16V 47μF
C334	ECEA1CU100	ELECT	16V 10μF
C335	ECEA1CU101	ELECT	16V 100μF
C346	ECEA1CN470	ELECT	16V 47μF
C351	ECCR1H471J	CERAMIC	50V 470pF
C352	ECCR1H471J	CERAMIC	50V 470pF
C353	ECCR1H391J	CERAMIC	50V 390pF
C355	ECKC3D152J	CERAMIC	2KV 1.5nF
C357	ECKC2H152J	CERAMIC	500V 1.5nF
C358	ECEA1HU220	ELECT	50V 22μF
C360	ECEA1CU331	ELECT	16V 330μF
C362	ECKC1H102J	CERAMIC	50V 1000pF
C368	ECEA2EU010	ELECT	250V 1μF
C369	ECEA1HUR47	ELECT	50V 0.47μF
C400	ECKC1H103JB	CERAMIC	50V 10nF
C401	ECQM1H334J	FILM	50V 330nF

Ref No.	Part No.	Description	
C402	ECQM1H334J	FILM	50V 330nF
C452	ECKC2H471J	CERAMIC	500V 470pF
C453	ECQB1H153K	FILM	50V 15nF
C454	ECEA1HFS4R7	ELECT	50V 4.7μF
C455	ECEA1HGE101	ELECT	50V 100μF
C456	ECEA1VU222	ELECT	35V 2200μF
C457	ECQM1H474J	FILM	50V 470nF
C458	ECEA1VU332	ELECT	35V 3300μF
C459	ECQM1H334J	FILM	50V 330nF
C460	ECQM1H224J	FILM	50V 220nF
C461	ECQM1H474J	FILM	50V 470nF
C462	ECQB1H223K	FILM	50V 22nF
C501	ECQM1H104J	FILM	50V 100nF
C502	ECQP1152GZ	FILM	100V 1.5nF
C503	ECQB1H473K	FILM	50V 47nF
C504	ECEA1CU102	ELECT	16V 1000μF
C505	ECCR1H680J	CERAMIC	50V 68pF
C506	ECEA1HU220	ELECT	50V 22μF
C507	ECEA1HU4R7	ELECT	50V 4.7μF
C508	ECEA1CU470	ELECT	16V 47μF
C510	ECQB1H682K	FILM	50V 6.8nF
C515	ECQB1H122J	FILM	50V 1.2nF
C517	ECQM1H104J	FILM	50V 100nF
C518	ECEA1CU100	ELECT	16V 10μF
C519	ECEA1CU330	ELECT	16V 33μF
C520	ECEA1VU4R7	ELECT	35V 4.7μF
C522	ECEA1CN100	ELECT	16V 10μF
C531	ECQM1103KZ	FILM	100V 10nF
C532	ECKC1H821J	CERAMIC	50V 820pF
C541	ECEA1HU2R2	ELECT	50V 2.2μF
C542	ECEA1JGE100	ELECT	63V 10μF
C543	ECEA1CU100	ELECT	16V 10μF
C551	ECEA2CGE010	ELECT	160V 1μF
C552	ECWF2H684J	FILM	500V 680nF
C553	ECEA2CU3R3	ELECT	160V 3.3μF
C554	ECEA2EU330	ELECT	250V 33μF
C555	ECKC2H471J	CERAMIC	500V 470pF
C556	ECKC3F182J	CERAMIC	3KV 1.8nF
C557	ECKC3F182J	CERAMIC	3KV 1.8nF
C558	ECWH12H822J	CERAMIC	500V 8.2nF
C560	ECWF2H514J	FILM	500V 510nF
C564	ECQM10223JZ	FILM	1KV 22nF
C565	ECKC3F152J	CERAMIC	3KV 1.5nF
C566	ECKC2H471J	CERAMIC	500V 470pF
C569	ECQM1H104J	FILM	50V 100nF
C576	ECEA1CU471	ELECT	16V 470μF
C600	ECEA1CU471	ELECT	16V 470μF
C601	ECEA1CU470	ELECT	16V 47μF
C602	ECQB1H223K	FILM	50V 22nF
C603	ECQB1H223K	FILM	50V 22nF
C604	ECQB1H223K	FILM	50V 22nF
C605	ECUVIH103ZFX	S.M. CAP	50V 10nF
C606	ECUVIH103ZFX	S.M. CAP	50V 10nF
C607	ECEA1HU010	ELECT	50V 1μF
C608	ECUV1H270JCG	S.M. CAP	50V 27pF
C609	ECEA1CU471	ELECT	16V 470μF
C610	ECQB1H104J	FILM	50V 100nF
C611	ECQB1H104J	FILM	50V 100nF
C612	ECUV1H270JCG	S.M. CAP	50V 27pF
C613	ECUVIH103ZFX	S.M. CAP	50V 10nF
C614	ECUVIH103ZFX	S.M. CAP	50V 10nF
C615	ECQM1H334J	FILM	50V 330nF
C616	ECCR1H121J	CERAMIC	50V 120pF
C618	ECQB1H223K	FILM	50V 22nF
C619	ECQB1H223K	FILM	50V 22nF
C620	ECUV1H102KBX	S.M. CAP	50V 1nF
C621	ECQB1H473K	FILM	50V 47nF
C622	ECKC1H103JB	CERAMIC	50V 10nF
C623	ECKC1H103JB	CERAMIC	50V 10nF
C624	ECKC1H103JB	CERAMIC	50V 10nF

**TX-28X1C/TX25X1C**  
**TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description			
C625	ECQB1H223K	FILM	50V	22nF	
C626	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C627	ECEA1CU221	ELECT	16V	220µF	
C629	ECQB1H223K	FILM	50V	22nF	
C630	ECUV1H221KBX	S.M. CAP	50V	220pF	
C631	ECUV1H221KBX	S.M. CAP	50V	220pF	
C632	ECQB1H104J	FILM	50V	100nF	
C633	ECQB1H223K	FILM	50V	22nF	
C635	ECCR1H220J	CERAMIC	50V	22pF	
C636	ECEA1CU220	ELECT	16V	22µF	
C637	ECRLA030E53R	TRIMMER		30pF	
C638	ECQM1H334J	FILM	50V	330nF	
C639	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C642	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C644	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C646	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C647	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C648	ECCR1H391J	CERAMIC	50V	390pF	
C652	ECEA1CU100	ELECT	16V	10µF	
C653	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C654	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C655	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C657	ECEA1CU100	ELECT	16V	10µF	
C661	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C662	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C663	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C664	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C665	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C670	ECUV1H100DCX	S.M. CAP	50V	10pF	
C671	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C672	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C673	ECUV1H270JX	S.M. CAP	50V	27pF	
C674	ECUV1H270JX	S.M. CAP	50V	27pF	
C675	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C681	ECEA1CN470	ELECT	16V	47µF	
C682	ECUV1H220JCX	S.M. CAP	50V	22pF	
C683	ECUV1H390JCX	S.M. CAP	50V	39pF	
C684	ECEA1HN010	ELECT	50V	1µF	
C685	ECEA1HU010	ELECT	50V	1µF	
C702	ECEA1HU101	ELECT	50V	100µF	
C703	ECKC1H103JB	CERAMIC	50V	10nF	
C704	ECKC1H103JB	CERAMIC	50V	10nF	
C705	ECQB1H332K	FILM	50V	3.3nF	
C706	ECKC1H103JB	CERAMIC	50V	10nF	
C707	ECQB1H103J	FILM	50V	10nF	
C708	ECKC1H103JB	CERAMIC	50V	10nF	
C812	ECQU2A473MN	FILM	200V	47nF	▲
C813	ECQU2A823MNB	FILM	200V	82nF	
C814	ECQE6104K	FILM	600V	100nF	▲
C821	ECKC2H472J	CERAMIC	500V	4.7nF	▲
C822	ECKC2H472J	CERAMIC	500V	4.7nF	▲
C823	ECKC2H472J	CERAMIC	500V	4.7nF	▲
C824	ECKC2H472J	CERAMIC	500V	4.7nF	▲
C825	ECOS2GG181N	ELECT	400V	180µF	▲
C827	ECKC1H272J	CERAMIC	50V	2.7nF	
C828	ECEA1HFS470	ELECT	50V	47µF	
C829	ECKC2H471J	CERAMIC	500V	470pF	▲
C831	ECKC3D122J	CERAMIC	2KV	1200pF	▲
C833	ECKC2H103J	CERAMIC	50V	10nF	▲
C834	ECQM1H334J	FILM	50V	330nF	
C836	ECKCNS332J	CERAMIC	1.2KV	3.3nF	▲
C851	ECKC3D821JB	CERAMIC	2KV	820pF	▲
C852	ECKC2H681J	CERAMIC	500V	680pF	▲
C853	ECKC2H102J	CERAMIC	500V	1nF	▲
C854	ECEA2EG151UE	ELECT	250V	150µF	
C855	ECEA1VGE331	ELECT	35V	330µF	
C856	ECEA1VGE102	ELECT	35V	1000µF	
C857	ECKC2H471J	CERAMIC	500V	470pF	▲
C858	ECEA1EGE102	ELECT	25V	1000µF	
C859	ECEA1EU100	ELECT	25V	10µF	

Ref No.	Part No.	Description			
C860	ECKC1H103JB	CERAMIC	50V	10nF	
C861	ECEA1CU101	ELECT	16V	100µF	
C863	ECQV1H105JZ	FILM	50V	1µF	
C872	ECEA1CU100	ELECT	16V	10µF	
C880	ECEA1HGE4R7	ELECT	50V	4.7µF	
C881	ECEA1CGE100	ELECT	16V	10µF	
C1134	ECKC1H271J	CERAMIC	50V	270pF	
C1136	ECEA0JU101	ELECT	6.3V	100µF	
C1137	ECKC1H223J	CERAMIC	50V	22nF	
C1201	ECKC1H103JB	CERAMIC	50V	10nF	
C1203	ECCR1H151J	CERAMIC	50V	150pF	
C1204	ECCR1H101J	CERAMIC	50V	100pF	
C1206	ECEA1CU102	ELECT	16V	1000µF	
C1207	ECCR1H121J	CERAMIC	50V	120pF	
C1208	ECQM1H104J	FILM	50V	100nF	
C1210	ECQM1H104J	FILM	50V	100nF	
C1212	ECEA1CU100	ELECT	16V	10µF	
C1214	ECEA0JGE102	ELECT	6.3V	1000µF	
C1217	ECKC1H103JB	CERAMIC	50V	10nF	
C1219	ECCR1H680J	CERAMIC	50V	68pF	
C1220	ECKC1H471J	CERAMIC	50V	470pF	
C1221	ECKC1H103JB	CERAMIC	50V	10nF	
C1222	ECEA0JU471	ELECT	6.3V	470µF	
C1225	ECKC1H471J	CERAMIC	50V	470pF	
C1227	ECKC1H103JB	CERAMIC	50V	10nF	
C1235	ECEA1HU2R2	ELECT	50V	2.2µF	
C1236	ECEA1HU2R2	ELECT	50V	2.2µF	
C1237	ECKC1H472J	CERAMIC	50V	4.7nF	
C1239	ECCR1H560J	CERAMIC	50V	56pF	
C1246	ECCR1H221J	CERAMIC	50V	220pF	
C1247	ECKC1H181J	CERAMIC	50V	180pF	
C1250	EXFP6471ZF	NETWORK			
C1251	ECKC1H101J	CERAMIC	50V	100pF	
C1252	ECEA1CU100	ELECT	16V	10µF	
C1253	ECCR1H101J	CERAMIC	50V	100pF	
C1254	ECQM1H104J	FILM	50V	100nF	
C1256	ECEA0JU102	ELECT	6.3V	1000µF	
C1257	ECKC1H101J	CERAMIC	50V	100pF	
C1258	ECKC1H471J	CERAMIC	50V	470pF	
C1259	ECKC1H271J	CERAMIC	50V	270pF	
C1260	ECCR1H121J	CERAMIC	50V	120pF	
C1262	EXFP6471ZF	NETWORK			
C1263	ECKC1H103JB	CERAMIC	50V	10nF	
C1264	ECKC1H471J	CERAMIC	50V	470pF	
C1265	ECKC1H471J	CERAMIC	50V	470pF	
C1266	ECKC1H471J	CERAMIC	50V	470pF	
C1267	ECKC1H471J	CERAMIC	50V	470pF	
C1269	ECCR1H121J	CERAMIC	50V	120pF	
C1270	ECCR1H391J	CERAMIC	50V	390pF	
C2101	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C2102	ECUV1H102KBX	S.M. CAP	50V	1nF	
C2103	ECUV1H102KBX	S.M. CAP	50V	1nF	
C2104	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C2105	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C2106	ECUV1H090DCX	S.M. CAP	50V	9pf	
C2107	ECQB1H332K	FILM	50V	3.3nF	
C2109	ECEA1CN100	ELECT	16V	10µF	
C2110	ECEA1CU470	ELECT	16V	47µF	
C2111	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C2112	ECQM1H224J	FILM	50V	220nF	
C2113	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C2114	ECEA1CU100	ELECT	16V	10µF	
C2125	ERJ6GMY0R00	S.M. WIRE	LINK		
C2132	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C2133	ECQB1H104J	FILM	50V	100nF	
C2134	ECQB1H223K	FILM	50V	22nF	
C2135	ECEA1CU101	ELECT	16V	100µF	
C2136	ECUV1H120JCX	S.M. CAP	50V	12pF	
C2137	ECQB1H102J	FILM	50V	1nF	
C2138	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C2150	ECUV1H470JCX	S.M. CAP	50V	47pF	

**TX-28X1C/TX25X1C  
TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description		
C2202	ECEA1EN4R7	ELECT	25V	4.7µF
C2203	ECEA1HU010	ELECT	50V	1µF
C2204	ECEA1EU4R7	ELECT	25V	4.7µF
C2205	ECUVIH103ZFX	S.M. CAP	50V	10nF
C2206	ECEA1CU100	ELECT	16V	10µF
C2207	ECQM1H224J	FILM	50V	220nF
C2208	ECEA1EU4R7	ELECT	25V	4.7µF
C2225	ECEA1HUR47	ELECT	50V	0.47µF
C2251	ECEA1CN470	ELECT	16V	47µF
C2253	ECEA1CN470	ELECT	16V	47µF
C2409	ECEA1CN100	ELECT	16V	10µF
C2410	ECEA1CN100	ELECT	16V	10µF
C2411	ECEA1HU010	ELECT	50V	1µF
C2416	ECQB1H103J	FILM	50V	10nF
C2417	ECEA1HUR33	ELECT	50V	0.33µF
C2421	ECEA1CU100	ELECT	16V	10µF
C2422	ECEA1CU100	ELECT	16V	10µF
C2423	ECQB1H103J	FILM	50V	10nF
C2424	ECEA1HUR33	ELECT	50V	0.33µF
C2425	ECEA1CU100	ELECT	16V	10µF
C2426	ECEA1CU100	ELECT	16V	10µF
C2427	ECEA1CU100	ELECT	16V	10µF
C2428	ECQB1H103J	FILM	50V	10nF
C2429	ECEA1CU470	ELECT	16V	47µF
C2430	ECEA1HU010	ELECT	50V	1µF
C2431	ECEA1CU100	ELECT	16V	10µF
C2451	ECEA1CU102	ELECT	16V	1000µF
C2452	ECEA1HN2R2	ELECT	50V	2.2µF
C2453	ECEA1CU101	ELECT	16V	100µF
C2454	ECEA1HN2R2	ELECT	50V	2.2µF
C2455	ECQB1H392J	FILM	50V	3.9nF
C2456	ECEA1CU470	ELECT	16V	47µF
C2457	ECQB1H103J	FILM	50V	10nF
C2458	ECQB1H123J	FILM	50V	12nF
C2459	ECEA1CN100	ELECT	16V	10µF
C2460	ECEA1CN100	ELECT	16V	10µF
C2461	ECQB1H103J	FILM	50V	10nF
C2462	ECQB1H223K	FILM	50V	22nF
C2463	ECQB1H103J	FILM	50V	10nF
C2464	ECQB1H392J	FILM	50V	3.9nF
C2651	ECKC1H103JB	CERAMIC	50V	10nF
C2652	ECKC1H103JB	CERAMIC	50V	10nF
C2653	ECEA1VU471	ELECT	35V	470µF
C2654	ECEA1VU471	ELECT	35V	470µF
C2655	ECKC1H222J	CERAMIC	50V	2.2nF
C2656	ECKC1H222J	CERAMIC	50V	2.2nF
C2662	ECKC1H562KB	CERAMIC	50V	5.6nF
C2663	ECKC1H562KB	CERAMIC	50V	5.6nF
C2664	ECQM1H104J	FILM	50V	100nF
C2665	ECQM1H104J	FILM	50V	100nF
C3001	ECEA1CU471	ELECT	16V	470µF
C3002	ECEA1CU330	ELECT	16V	33µF
C3003	ECEA1CU100	ELECT	16V	10µF
C3004	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3005	ECEA1CU100	ELECT	16V	10µF
C3006	ECEA1CN100	ELECT	16V	10µF
C3007	ECUV1H101JCX	S.M. CAP	50V	100pF
C3008	ECEA1CU221	ELECT	16V	220µF
C3009	ECEA1CU100	ELECT	16V	10µF
C3011	ECEA1CU100	ELECT	16V	10µF
C3012	ECEA1CU100	ELECT	16V	10µF
C3014	ECUV1H101JCX	S.M. CAP	50V	100pF
C3015	ECEA1CN100	ELECT	16V	10µF
C3016	ECEA1HU4R7	ELECT	50V	4.7µF
C3017	ECEA1HU4R7	ELECT	50V	4.7µF
C3018	ECEA1CU100	ELECT	16V	10µF
C3019	ECEA1CU100	ELECT	16V	10µF
C3020	ECEA1CU471	ELECT	16V	470µF
C3021	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3022	ECEA1CN100	ELECT	16V	10µF
C3023	ECEA1HU4R7	ELECT	50V	4.7µF

Ref No.	Part No.	Description		
C3024	ECEA1HU4R7	ELECT	50V	4.7µF
C3025	ECUV1H561KBX	S.M. CAP	50V	560pF
C3026	ECUV1H561KBX	S.M. CAP	50V	560pF
C3027	ECUV1H222KBX	S.M. CAP	50V	2.2nF
C3028	ECUV1H222KBX	S.M. CAP	50V	2.2nF
C3029	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3030	ECEA1CU101	ELECT	16V	100µF
C3032	ECEA1CU220	ELECT	16V	22µF
C3034	ECEA1CU220	ELECT	16V	22µF
C3035	ECUV1H121JCX	S.M. CAP	50V	120pF
C3037	ECQB1H104J	FILM	50V	100nF
C3039	ECEA1CU471	ELECT	16V	470µF
C3043	ECUV1H102KBX	S.M. CAP	50V	1nF
C3044	ECUV1H102KBX	S.M. CAP	50V	1nF
C3045	ECUV1H102KBX	S.M. CAP	50V	1nF
C3046	ECUV1H102KBX	S.M. CAP	50V	1nF
C3050	ECEA1CN101	ELECT	16V	100µF
C3061	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3079	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3162	ECKC1H222J	CERAMIC	50V	2.2nF
C3163	ECKC1H222J	CERAMIC	50V	2.2nF
C3165	ECKC1H222J	CERAMIC	50V	2.2nF
C3166	ECKC1H222J	CERAMIC	50V	2.2nF
C3167	ECEA1CU471	ELECT	16V	470µF
C3169	ECEA1CN100	ELECT	16V	10µF
C3170	ECEA1CU471	ELECT	16V	470µF
C3171	ECEA1CN470	ELECT	16V	47µF
C3172	ECEA1HN010	ELECT	50V	1µF
C3173	ECEA1HN4R7	ELECT	50V	4.7µF
C3174	ECEA1HN010	ELECT	50V	1µF
C3175	ECEA1HN4R7	ELECT	50V	4.7µF
C3176	ECEA1HN4R7	ELECT	50V	4.7µF
C3177	ECQM1H224J	FILM	50V	220nF
C3301	ECKC1H103JB	CERAMIC	50V	10nF
C3302	ECEA1CU471	ELECT	16V	470µF
C3303	ECEA1HU3R3	ELECT	50V	3.3µF
C3304	ECKC1H103JB	CERAMIC	50V	10nF
C3306	ECEA1CU100	ELECT	16V	10µF
C3307	ECEA1HUR47	ELECT	50V	0.47µF
C3330	ECQB1H103J	FILM	50V	10nF
C3331	ECEA1CU471	ELECT	16V	470µF
C3332	ECEA1CU101	ELECT	16V	100µF
C3333	ECCR1H680J	CERAMIC	50V	68pF
C3334	ECCR1H680J	CERAMIC	50V	68pF
C3335	ECCR1H680J	CERAMIC	50V	68pF
C3502	ECQB1H104J	FILM	50V	100nF
C3503	ECQM1H334J	FILM	50V	330nF
C3505	ECQB1H103J	FILM	50V	10nF
C3507	ECEA1CU471	ELECT	16V	470µF
C3508	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3518	ECQB1H103J	FILM	50V	10nF
C3521	ECQB1H104J	FILM	50V	100nF
C3522	ECEA1HU2R2	ELECT	50V	2.2µF
C3523	ECEA0JU101	ELECT	6.3V	100µF
C3524	ECEA1CU101	ELECT	16V	100µF
C3525	ECEA1CU470	ELECT	16V	47µF
C3526	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3527	ECUV1H150JCX	S.M. CAP	50V	15pF
C3528	ECUV1H100DCX	S.M. CAP	50V	10pF
C3530	ECEA0JU101	ELECT	6.3V	100µF
C3532	ECQB1H104J	FILM	50V	100nF
C3533	ECQB1H104J	FILM	50V	100nF
C3534	ECEA1CU101	ELECT	16V	100µF
C3536	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3546	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3548	ECEA0JU101	ELECT	6.3V	100µF
C3550	ECEA1HU0R1	ELECT	50V	0.1µF
C3552	ECUVIH103ZFX	S.M. CAP	50V	10nF
C3553	ECEA1CU221	ELECT	16V	220µF
C3555	ECEA1CN330	ELECT	16V	33µF
C3561	ECEA1HU010	ELECT	50V	1µF

**TX-28X1C/TX25X1C**  
**TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description			
C3563	ECEA1CU101	ELECT	16V	100 $\mu$ F	
C3564	ECUVIH103ZFX	S.M. CAP	50V	10nF	
C3565	ECUV1H102KBX	S.M. CAP	50V	1nF	
C3570	ECEA0JU471	ELECT	6.3V	470 $\mu$ F	
C3571	ECQB1H104J	FILM	50V	100nF	
C3573	ECQB1H104J	FILM	50V	100nF	
C3574	ECEA1CU100	ELECT	16V	10 $\mu$ F	
C3575	ECEA1CU100	ELECT	16V	10 $\mu$ F	
C3576	ECEA1CU100	ELECT	16V	10 $\mu$ F	
C3608	ECUV1H180JX	S.M. CAP	50V	18pF	
C3611	ECUV1H180JX	S.M. CAP	50V	18pF	

### RESISTORS

R11	ERJ6GMYJ223	S.M.CARB	0.1W	5%	22K $\Omega$
R12	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100 $\Omega$
R13	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100 $\Omega$
R017	ERG1ANJ101	METAL	1W	5%	100 $\Omega$
R070	ERG3SJ153	METAL	3W	5%	15K $\Omega$
R125	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220 $\Omega$
R128	EVNDCAA03B53	RF. AGC			5K $\Omega$
R130	ERJ6GMYJ222	S.M.CARB	0.1W	5%	2K2 $\Omega$
R131	ERJ6GMYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$
R133	ERJ6GMYJ392	S.M.CARB	0.1W	5%	3K9 $\Omega$
R134	ERJ6GMYJ392	S.M.CARB	0.1W	5%	3K9 $\Omega$
R136	ERJ6GMYJ822	S.M.CARB	0.1W	5%	8K2 $\Omega$
R137	ERJ6GMYJ824	S.M.CARB	0.1W	5%	820K $\Omega$
R138	ERJ6GMYJ561	S.M.CARB	0.1W	5%	560 $\Omega$
R139	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1K $\Omega$
R141	ERJ6GMYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$
R143	ERJ6GMYJ331	S.M.CARB	0.1W	5%	330 $\Omega$
R144	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47K $\Omega$
R145	ERJ6GMYJ470	S.M.CARB	0.1W	5%	47 $\Omega$
R146	ERJ6GMYJ471	S.M.CARB	0.1W	5%	470 $\Omega$
R147	ERJ6GMYJ334	S.M. CARB	0.1W	5%	330K $\Omega$
R148	ERJ6GMYJ334	S.M. CARB	0.1W	5%	330K $\Omega$
R149	ERQ12H-J390	METAL	0.5W	5%	39 $\Omega$
R150	ERJ6GMYJ561	S.M.CARB	0.1W	5%	560 $\Omega$
R151	ERJ6GMYJ391	S.M.CARB	0.1W	5%	390 $\Omega$
R152	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100 $\Omega$
R153	ERJ6GMYJ100	S.M.CARB	0.1W	5%	10 $\Omega$
R154	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10K $\Omega$
R159	ERJ6GMYJ392	S.M.CARB	0.1W	5%	3K9 $\Omega$
R160	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220 $\Omega$
R161	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220 $\Omega$
R162	ERJ6GMYJ392	S.M.CARB	0.1W	5%	3K9 $\Omega$
R164	ERJ6GMY0R00V	S.M.CARB	0.1W	5%	1K $\Omega$
R168	ERD25TJ103T	CARBON	0.25W	5%	10K $\Omega$
R181	ERJ6GMYJ153	S.M.CARB	0.1W	5%	15K $\Omega$
R182	ERJ6GMYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$
R183	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1K $\Omega$
R184	ERJ6GMYJ104	S.M.CARB	0.1W	5%	100K $\Omega$
R185	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220 $\Omega$
R186	ERJ6GMYJ753	S.M. CARB	0.1W	5%	75K $\Omega$
R187	ERJ6GMYJ183	S.M.CARB	0.1W	5%	18K $\Omega$
R188	ERJ6GMYJ222	S.M.CARB	0.1W	5%	2K2 $\Omega$
R189	ERJ6GMYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$
R191	ERDS2TJ102T	CARBON	0.25W	5%	1K $\Omega$
R201	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$
R206	ERD25TJ103	CARBON	0.25W	5%	10K $\Omega$
R209	ERD25TJ104	CARBON	0.25W	5%	100K $\Omega$
R210	ERD25TJ123	CARBON	0.25W	5%	12K $\Omega$
R214	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$
R252	ERD25TJ333	CARBON	0.25W	5%	33K $\Omega$
R253	ERD25TJ563	CARBON	0.25W	5%	56K $\Omega$
R254	ERD25TJ104	CARBON	0.25W	5%	100K $\Omega$
R255	ERD25TJ473	CARBON	0.25W	5%	47K $\Omega$
R256	ERD25TJ103	CARBON	0.25W	5%	10K $\Omega$
R257	ERD25TJ270	CARBON	0.25W	5%	27 $\Omega$

Ref No.	Part No.	Description			
R258	ERD25TJ270	CARBON	0.25W	5%	27 $\Omega$
R260	ERD25TJ101	CARBON	0.25W	5%	100 $\Omega$
R262	ERD25TJ152	CARBON	0.25W	5%	1K5 $\Omega$
R265	ERD25TJ101	CARBON	0.25W	5%	100 $\Omega$
R279	ERD25TJ333	CARBON	0.25W	5%	33K $\Omega$
R282	ERD25TJ152	CARBON	0.25W	5%	1K5 $\Omega$
R300	ERJ6GMYJ821	S.M.CARB	0.1W	5%	820 $\Omega$
R301	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1K $\Omega$
R302	ERJ6GMYJ223	S.M.CARB	0.1W	5%	22K $\Omega$
R303	ERJ6GMYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$
R306	ERJ6GMYJ100	S.M.CARB	0.1W	5%	10 $\Omega$
R307	ERJ6GMYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$
R308	ERJ6GMYJ122	S.M.CARB	0.1W	5%	1K2 $\Omega$
R310	ERJ6GMYJ152	S.M.CARB	0.1W	5%	1K5 $\Omega$
R312	ERJ6GMYJ823	S.M.CARB	0.1W	5%	82K $\Omega$
R313	ERJ6GMYJ563	S.M.CARB	0.1W	5%	56K $\Omega$
R314	ERJ6GMYJ223	S.M.CARB	0.1W	5%	22K $\Omega$
R315	ERJ6GMYJ223	S.M.CARB	0.1W	5%	22K $\Omega$
R316	ERJ6GMYJ821	S.M.CARB	0.1W	5%	820 $\Omega$
R317	EVNDCAA03B54	SUB CONTRAST			50K $\Omega$
R318	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100 $\Omega$
R319	ERJ6GMYJ563	S.M.CARB	0.1W	5%	56K $\Omega$
R320	ERJ6GMYJ392	S.M.CARB	0.1W	5%	3K9 $\Omega$
R321	EVNDCAA03B14	SUB BRIGHTNESS			10K $\Omega$
R322	ERJ6GMYJ333	S.M.CARB	0.1W	5%	33K $\Omega$
R323	ERJ6GMYJ183	S.M.CARB	0.1W	5%	18K $\Omega$
R324	ERJ6GMYJ223	S.M.CARB	0.1W	5%	22K $\Omega$
R325	ERJ6GMYJ622	S.M. CARB	0.1W	5%	62K $\Omega$
R326	ERJ6GMYJ153	S.M.CARB	0.1W	5%	15K $\Omega$
R327	ERJ6GMYJ394	S.M. CARB	0.1W	5%	390K $\Omega$
R328	ERJ6GMYJ125	S.M. CARB	0.1W	5%	1.2M $\Omega$
R329	ERJ6GMYJ153	S.M.CARB	0.1W	5%	15K $\Omega$
R330	ERJ6GMYJ474	S.M.CARB	0.1W	5%	470K $\Omega$
R331	ERJ6GMYJ332	S.M.CARB	0.1W	5%	3K3 $\Omega$
R333	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100 $\Omega$
R334	ERJ6GMYJ274	S.M. CARB	0.1W	5%	270K $\Omega$
R335	ERDS1TJ471	CARBON	0.5W	5%	470 $\Omega$
R336	ERJ6GMYJ223	S.M.CARB	0.1W	5%	22K $\Omega$
R337	ERJ6GMYJ273	S.M.CARB	0.1W	5%	27K $\Omega$
R338	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1K $\Omega$
R340	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100 $\Omega$
R341	ERJ6GMYJ562	S.M.CARB	0.1W	5%	5K6 $\Omega$
R342	ERJ6GMYJ184	S.M.CARB	0.1W	5%	180K $\Omega$
R343	ERJ6GMYJ222	S.M.CARB	0.1W	5%	2K2 $\Omega$
R344	ERJ6GMYJ222	S.M.CARB	0.1W	5%	2K2 $\Omega$
R347	ERJ6GMYJ563	S.M.CARB	0.1W	5%	56K $\Omega$
R348	ERJ6GMYJ222	S.M.CARB	0.1W	5%	2K2 $\Omega$
R351	ERG2ANJ103	METAL	2W	5%	10K $\Omega$
R352	ERG2ANJ103	METAL	2W	5%	10K $\Omega$
R353	ERG2ANJ103	METAL	2W	5%	10K $\Omega$
R354	ERD25TJ181	CARBON	0.25W	5%	180 $\Omega$
R355	ERD25TJ271	CARBON	0.25W	5%	270 $\Omega$
R356	ERD25TJ181	CARBON	0.25W	5%	180 $\Omega$
R357	EVN65UA00B22	GREEN DRIVE			200 $\Omega$
R358	EVN65UA00B22	RED DRIVE			200 $\Omega$
R359	ERD25TJ471	CARBON	0.25W	5%	470 $\Omega$
R360	ERD25TJ471	CARBON	0.25W	5%	470 $\Omega$
R361	ERD25TJ471	CARBON	0.25W	5%	470 $\Omega$
R362	EVN65UA00B53	GREEN CUTOFF			5K $\Omega$
R364	EVN65UA00B53	RED CUTOFF			5K $\Omega$
R365	ERDS1FJ152	CARBON	0.5W	5%	1K5 $\Omega$
R366	ERDS1TJ152	CARBON	0.5W	5%	1K5 $\Omega$
R367	ERDS1TJ152	CARBON	0.5W	5%	1K5 $\Omega$
R369	EVN65UA00B53	BLUE CUTOFF			5K $\Omega$
R374	ERD25TJ103	CARBON	0.25W	5%	10K $\Omega$
R376	ERD25TJ152	CARBON	0.25W	5%	1K5 $\Omega$
R377	ERD25TJ101	CARBON	0.25W	5%	100 $\Omega$
R378	ERD25TJ274	CARBON	0.25W	5%	270K $\Omega$
R379	ERD25TJ183	CARBON	0.25W	5%	18K $\Omega$
R380	ERD25TJ684	CARBON	0.25W	5%	680K $\Omega$
R402	ERD25TJ102	CARBON	0.25W	5%	1K $\Omega$

**TX-28X1C/TX25X1C  
TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description		
R403	ERD25TJ184	CARBON	0.25W	5% 180KΩ
R404	ERD25TJ274	CARBON	0.25W	5% 270KΩ
R405	EVNDCAA03B35	VERT. HEIGHT		300KΩ
R406	ERD25TJ105	CARBON	0.25W	5% 1MΩ
R407	ERD25TJ222	CARBON	0.25W	5% 2K2Ω
R408	ERD25TJ102	CARBON	0.25W	5% 1KΩ
R409	ERD25TJ124	CARBON	0.25W	5% 120KΩ
R410	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R411	ERD25TJ334	CARBON	0.25W	5% 330KΩ
R413	ERD25TJ823	CARBON	0.25W	5% 82KΩ
R414	ERD25TJ754	CARBON	0.25W	5% 750KΩ
R451	TSF19801	FS LINK		▲
R452	ERD25TJ432	CARBON	0.25W	5% 4.3KΩ
R453	ERD25TJ332	CARBON	0.25W	5% 3K3Ω
R455	ERD25TJ1R0	CARBON	0.25W	5% 1Ω
R456	ERD25TJ1R5	CARBON	0.25W	5% 1R5Ω
R457	ERD25TJ562	CARBON	0.25W	5% 5K6Ω
R458	ERD25TJ682	CARBON	0.25W	5% 6K8Ω
R459	ERD25TJ363	CARBON	0.25W	5% 36KΩ
R460	ERD25TJ473	CARBON	0.25W	5% 47KΩ
R461	ERD25TJ1R0	CARBON	0.25W	5% 1Ω
R462	ERDS1TJ1R8	CARBON	0.5W	5% 1R8Ω
R466	ERDS1TJ152	CARBON	0.5W	5% 1K5Ω
R468	ERDS1TJ471	CARBON	0.5W	5% 470Ω
R469	ERDS1TJ391	CARBON	0.5W	5% 390Ω
R470	ERG2SJ391	METAL	2W	5% 390Ω
R472	ERD25TJ392	CARBON	0.25W	5% 3K9Ω
R473	ERD25TJ432	CARBON	0.25W	5% 4.3KΩ
R476	ERG2ANJP331H	METAL	2W	5% 330Ω
R500	ERD25TJ104	CARBON	0.25W	5% 100KΩ
R501	ERD25TJ102	CARBON	0.25W	5% 1KΩ
R502	EVND4AA00B14	HOR. HOLD		10KΩ
R503	ERO25CKF3002	METAL	0.25W	1% 30KΩ
R504	ERD25TJ562	CARBON	0.25W	5% 5K6Ω
R505	ERD25TJ563	CARBON	0.25W	5% 56KΩ
R506	ERD25TJ682	CARBON	0.25W	5% 6K8Ω
R507	EVNDCAA03B54	HOR. CENTRE		50KΩ
R508	ERD25TJ273	CARBON	0.25W	5% 27KΩ
R510	ERD25TJ222	CARBON	0.25W	5% 2K2Ω
R511	ERD25TJ682	CARBON	0.25W	5% 6K8Ω
R512	ERD25TJ820	CARBON	0.25W	5% 82Ω
R513	ERD25TJ333	CARBON	0.25W	5% 33KΩ
R514	ERD25TJ392	CARBON	0.25W	5% 3K9Ω
R515	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R516	ERD25TJ562	CARBON	0.25W	5% 5K6Ω
R518	ERD25TJ391	CARBON	0.25W	5% 390Ω
R519	ERD25TJ562	CARBON	0.25W	5% 5K6Ω
R520	ERD25TJ153	CARBON	0.25W	5% 15KΩ
R521	ERD25TJ102	CARBON	0.25W	5% 1KΩ
R522	ERD25TJ473	CARBON	0.25W	5% 47KΩ
R523	ERD25TJ102	CARBON	0.25W	5% 1KΩ
R524	ERD25TJ683	CARBON	0.25W	5% 68KΩ
R527	ERO25CKF8201	METAL	0.25W	1% 8K2Ω
R528	ERO25CKF3901	METAL	0.25W	1% 3K9Ω
R529	ERD25TJ101	CARBON	0.25W	5% 100Ω
R531	ERG2ANJ391	METAL	2W	5% 390Ω
R532	ERD25TJ273	CARBON	0.25W	5% 27KΩ
R533	ERD25TJ471	CARBON	0.25W	5% 470Ω
R534	ERD25TJ682	CARBON	0.25W	5% 6K8Ω
R535	ERD25TJ124	CARBON	0.25W	5% 120KΩ
R536	ERD25TJ393	CARBON	0.25W	5% 39KΩ
R537	ERD25TJ105	CARBON	0.25W	5% 1MΩ
R538	ERD25TJ394	CARBON	0.25W	5% 390KΩ
R539	ERQ14AJW100	METAL	0.25W	5% 10Ω
R542	ERD25TJ474	CARBON	0.25W	5% 470KΩ
R543	ERD25TJ333	CARBON	0.25W	5% 33KΩ
R544	ERQ14AJ101	METAL	0.25W	5% 100Ω
R545	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R556	ERQ12HJ1R2	METAL	0.5W	5% 1R2Ω
R557	ERQ12HJ1R2	METAL	0.5W	5% 1R2Ω

Ref No.	Part No.	Description		
R561	ERD25TJ153	CARBON	0.25W	5% 15KΩ
R562	ERDS1TJ124	CARBON	0.5W	5% 120KΩ
R565	ERG2ANJP102H	METAL	0.5W	5% 1KΩ
R568	ERD25TJ274	CARBON	0.25W	5% 270KΩ
R571	ERQ12HJ1R5	FUSIBLE	0.5W	5% 1.5Ω
R572	ERD25TJ473	CARBON	0.25W	5% 47KΩ
R600	ERQ14AJW3R3	FUSABLE	0.25W	5% 3.3Ω
R601	ERJ6GMYJ222	S.M.CARB	0.1W	5% 2K2Ω
R602	ERJ6GMYJ331	S.M.CARB	0.1W	5% 330Ω
R603	ERJ6GMYJ563	S.M.CARB	0.1W	5% 56KΩ
R604	ERJ6GMYJ183	S.M.CARB	0.1W	5% 18KΩ
R605	ERJ6GMYJ184	S.M.CARB	0.1W	5% 180KΩ
R606	EVNDCAA03B54	SUB COLOUR		50KΩ
R607	ERJ6GMYJ563	S.M.CARB	0.1W	5% 56KΩ
R609	ERJ6GMYJ822	S.M.CARB	0.1W	5% 8K2Ω
R610	EVND4AA00B13	SECAM DISCR.		1KΩ
R612	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R615	ERJ6GMYJ103	S.M.CARB	0.1W	5% 10KΩ
R616	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R617	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R618	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R622	ERJ6GMYJ332	S.M.CARB	0.1W	5% 3K3Ω
R623	ERJ6GMYJ100	S.M.CARB	0.1W	5% 10Ω
R624	ERJ6GMYJ100	S.M.CARB	0.1W	5% 10Ω
R625	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R626	ERJ6GMYJ273	S.M.CARB	0.1W	5% 27KΩ
R627	ERJ6GMYJ473	S.M.CARB	0.1W	5% 47KΩ
R630	ERJ6GMYJ681	S.M.CARB	0.1W	5% 680Ω
R631	ERJ6GMYJ102	S.M.CARB	0.1W	5% 1KΩ
R632	ERJ6GMYJ333	S.M.CARB	0.1W	5% 33KΩ
R633	ERJ6GMYJ332	S.M.CARB	0.1W	5% 3K3Ω
R641	ERJ6GMYJ152	S.M.CARB	0.1W	5% 1K5Ω
R642	ERJ6GMYJ104	S.M.CARB	0.1W	5% 100KΩ
R643	ERJ6GMYJ103	S.M.CARB	0.1W	5% 10KΩ
R644	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R646	ERJ6GMYJ102	S.M.CARB	0.1W	5% 1KΩ
R647	ERJ6GMYJ103	S.M.CARB	0.1W	5% 10KΩ
R649	ERJ6GMYJ221	S.M.CARB	0.1W	5% 220Ω
R650	ERJ6GMYJ472	S.M.CARB	0.1W	5% 4K7Ω
R652	ERJ6GMYJ333	S.M.CARB	0.1W	5% 33KΩ
R653	ERJ6GMYJ222	S.M.CARB	0.1W	5% 2K2Ω
R654	ERJ6GMYJ472	S.M.CARB	0.1W	5% 4K7Ω
R655	ERJ6GMYJ472	S.M.CARB	0.1W	5% 4K7Ω
R656	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R657	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R662	ERJ6GMYJ824	S.M.CARB	0.1W	5% 820KΩ
R665	ERJ6GMYJ103	S.M.CARB	0.1W	5% 10KΩ
R667	ERJ6GMYJ822	S.M.CARB	0.1W	5% 8K2Ω
R668	ERJ6GMYJ272	S.M.CARB	0.1W	5% 2K7Ω
R669	ERJ6GMYJ153	S.M.CARB	0.1W	5% 15KΩ
R670	ERJ6GMYJ153	S.M.CARB	0.1W	5% 15KΩ
R672	ERJ6GMYJ822	S.M.CARB	0.1W	5% 8K2Ω
R675	ERJ6GMYJ472	S.M.CARB	0.1W	5% 4K7Ω
R676	ERJ6GMYJ333	S.M.CARB	0.1W	5% 33KΩ
R677	ERJ6GMYJ471	S.M.CARB	0.1W	5% 470Ω
R678	ERJ6GMYJ331	S.M.CARB	0.1W	5% 330Ω
R679	ERJ6GMYJ471	S.M.CARB	0.1W	5% 470Ω
R682	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R683	ERJ6GMYJ822	S.M.CARB	0.1W	5% 8K2Ω
R684	ERJ6GMYJ821	S.M.CARB	0.1W	5% 820Ω
R686	ERJ6GMYJ823	S.M.CARB	0.1W	5% 82KΩ
R687	ERJ6GMYJ222	S.M.CARB	0.1W	5% 2K2Ω
R688	ERJ6GMYJ821	S.M.CARB	0.1W	5% 820Ω
R689	ERJ6GMYJ331	S.M.CARB	0.1W	5% 330Ω
R690	ERJ6GMYJ223	S.M.CARB	0.1W	5% 22KΩ
R691	ERJ6GMYJ101	S.M.CARB	0.1W	5% 100Ω
R692	ERJ6GMYJ392	S.M.CARB	0.1W	5% 3K9Ω
R693	ERJ6GMYJ102	S.M.CARB	0.1W	5% 1KΩ
R694	ERJ6GMYJ182	S.M.CARB	0.1W	5% 1K8Ω
R695	ERJ6GMYJ153	S.M.CARB	0.1W	5% 15KΩ
R696	ERJ6GMYJ102	S.M.CARB	0.1W	5% 1KΩ

**TX-28X1C/TX25X1C**  
**TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description		
R697	ERJ6GMYJ221	S.M.CARB 0.1W	5%	220Ω
R698	ERJ6GMYJ331	S.M.CARB 0.1W	5%	330Ω
R699	ERJ6GMYJ331	S.M.CARB 0.1W	5%	330Ω
R701	ERD25TJ100	CARBON 0.25W	5%	10Ω
R702	ERD25TJ150	CARBON 0.25W	5%	15Ω
R703	ERD25TJ681	CARBON 0.25W	5%	680Ω
R704	EVNDCAA03B15	PARABOLA		100KΩ
R705	ERD25TJ472	CARBON 0.25W	5%	4K7Ω
R706	ERQ14AJ100	METAL 0.25W	5%	10Ω ▲
R707	ERD25TJ242	CARBON 0.25W	5%	2K4Ω
R708	EVNDCAA03B13	WIDTH ADJUST		1KΩ
R709	ERD25TJ153	CARBON 0.25W	5%	15KΩ
R710	ERD25TJ682	CARBON 0.25W	5%	6K8Ω
R711	ERD25TJ393	CARBON 0.25W	5%	39KΩ
R712	ERD25TJ153	CARBON 0.25W	5%	15KΩ
R713	ERD25TJ393	CARBON 0.25W	5%	39KΩ
R714	EVND4AA00B33	VARIABLE RESIS OR		
R715	ERD25TJ153	CARBON 0.25W	5%	15KΩ
R716	ERD25TJ133	CARBON 0.25W	5%	13KΩ
R751	ERQ12HJ330	METAL 0.5W	5%	33Ω ▲
R811	ERC12ZGK335D	SOLID 0.5W	10%	3M3Ω
R821	ERF5ZK2R7	WOUND 5W	10%	2.7Ω ▲
R822	ERG2ANJ104	METAL 2W	5%	100KΩ
R823	ERG2ANJ104	METAL 2W	5%	100KΩ
R824	ERD25TJ222	CARBON 0.25W	5%	2K2Ω
R825	ERW12PKR27	WOUND 0.5W	10%	R27Ω ▲
R826	ERD25TJ823	CARBON 0.25W	5%	82KΩ
R827	ERQ12HJ5R6	METAL 0.5W	5%	5R6Ω ▲
R828	ERG2ANJ683	METAL 2W	5%	68KΩ
R830	ERF2AJ560	WOUND 2W	5%	56Ω ▲
R831	ERDS1TJ274	CARBON 0.5W	5%	270KΩ
R832	ERDS1TJ274	CARBON 0.5W	5%	270KΩ
R833	ERX1SJ6R8	METAL 1W	5%	6.8Ω
R834	ERD75TAJ825	CARBON 0.75W	5%	8M2Ω ▲
R852	ERQ12HJKR27	METAL 0.5W	10%	0.27Ω ▲
R855	ERG2ANJ330	METAL 2W	5%	33Ω
R856	ERF2AK1R5	WOUND 2W	10%	1.5Ω ▲
R873	ERD25TJ123	CARBON 0.25W	5%	12KΩ
R880	ERF3AKR56	WOUND 3W	10%	0.56Ω ▲
R882	ERD25TJ272	CARBON 0.25W	5%	2K7Ω
R883	ERD25TJ471	CARBON 0.25W	5%	470Ω
R884	ERD25TJ223	CARBON 0.25W	5%	22KΩ
R890	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R891	ERD25TJ471	CARBON 0.25W	5%	470Ω
R.121	ERJ6GMYOR00	S.M. WIRE LINK		
R.155	ERJ6GMYOR00	S.M. WIRE LINK		
R.305	ERJ6GMYOR00	S.M. WIRE LINK		
R.309	ERJ6GMYOR00	S.M. WIRE LINK		
R.608	ERJ6GMYOR00	S.M. WIRE LINK		
R.619	ERJ6GMYOR00	S.M. WIRE LINK		
R.629	ERJ6GMYOR00	S.M. WIRE LINK		
R.635	ERJ6GMYOR00	S.M. WIRE LINK		
R.645	ERJ6GMYOR00	S.M. WIRE LINK		
R.651	ERJ6GMYOR00	S.M. WIRE LINK		
R.663	ERJ6GMYOR00	S.M. WIRE LINK		
R.680	ERJ6GMYOR00	S.M. WIRE LINK		
R1105	ERO25CKF9531	METAL 0.25W	1%	9K53Ω ▲
R1107	ERO25CKF2371	METAL 0.25W	1%	2K37Ω ▲
R1108	ERO25CKF2371	METAL 0.25W	1%	2K37Ω ▲
R1109	ERO25CKF3161	METAL 0.25W	1%	3K16Ω ▲
R1110	ERO25CKF4871	METAL 0.25W	1%	4K87Ω ▲
R1111	ERO25CKF9531	METAL 0.25W	1%	9K53Ω ▲
R1112	ERO25CKF2371	METAL 0.25W	1%	2K37Ω ▲
R1113	ERO25CKF2371	METAL 0.25W	1%	2K37Ω ▲
R1114	ERO25CKF3161	METAL 0.25W	1%	3K16Ω ▲
R1115	ERO25CKF4871	METAL 0.25W	1%	4K87Ω ▲
R1117	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1118	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1119	ERD25TJ103	CARBON 0.25W	5%	10KΩ

Ref No.	Part No.	Description		
R1122	ERD25TJ153	CARBON 0.25W	5%	15KΩ
R1123	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1124	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1125	ERD25TJ682	CARBON 0.25W	5%	6K8Ω
R1127	ERD25TJ682	CARBON 0.25W	5%	6K8Ω
R1130	ERD25TJ912	CARBON 0.25W	5%	9.1KΩ
R1131	ERD25TJ472	CARBON 0.25W	5%	4K7Ω
R1132	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1135	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1147	ERO25CKF2152	METAL 0.25W	1%	21K5Ω ▲
R1148	ERO25CKF2152	METAL 0.25W	1%	21K5Ω ▲
R1191	ERD25TJ271	CARBON 0.25W	5%	270Ω
R1201	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1204	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1205	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1206	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1207	ERD25TJ682	CARBON 0.25W	5%	6K8Ω
R1208	ERD25TJ332	CARBON 0.25W	5%	3K3Ω
R1210	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1211	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1212	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1213	ERD25TJ562	CARBON 0.25W	5%	5K6Ω
R1214	ERD25TJ332	CARBON 0.25W	5%	3K3Ω
R1215	ERG1SJ221	METAL 1W	5%	220Ω
R1217	ERD25TJ823	CARBON 0.25W	5%	82KΩ
R1218	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1219	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1221	ERD25TJ562	CARBON 0.25W	5%	5K6Ω
R1222	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1224	ERD25TJ471	CARBON 0.25W	5%	470Ω
R1226	ERDS1TJ154	CARBON 0.5W	5%	150KΩ
R1230	ERD25TJ562	CARBON 0.25W	5%	5K6Ω
R1232	ERD25TJ332	CARBON 0.25W	5%	3K3Ω
R1233	ERD25TJ332	CARBON 0.25W	5%	3K3Ω
R1235	ERD25TJ182	CARBON 0.25W	5%	1K8Ω
R1236	ERD25TJ472	CARBON 0.25W	5%	4K7Ω
R1237	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1238	ERD25TJ223	CARBON 0.25W	5%	22KΩ
R1239	ERD25TJ272	CARBON 0.25W	5%	2K7Ω
R1241	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1243	ERD25TJ153	CARBON 0.25W	5%	15KΩ
R1246	ERD25TJ562	CARBON 0.25W	5%	5K6Ω
R1248	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1250	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1254	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1255	ERD25TJ222	CARBON 0.25W	5%	2K2Ω
R1256	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1259	ERD25TJ123	CARBON 0.25W	5%	12KΩ
R1260	ERD25TJ123	CARBON 0.25W	5%	12KΩ
R1261	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1262	ERD25TJ222	CARBON 0.25W	5%	2K2Ω
R1263	ERD25TJ223	CARBON 0.25W	5%	22KΩ
R1264	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1265	ERD25TJ562	CARBON 0.25W	5%	5K6Ω
R1283	ERX1SJ3R3	METAL 1W	5%	3.3Ω
R1301	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1302	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1303	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1304	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1305	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1306	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1309	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1310	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1311	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1312	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1313	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1314	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1315	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1316	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1319	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1320	ERD25TJ101	CARBON 0.25W	5%	100Ω

**TX-28X1C/TX25X1C  
TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description		
R1321	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1324	ERD25TJ221	CARBON 0.25W	5%	220Ω
R1325	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1326	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1327	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1328	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1329	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1331	ERD25TJ562	CARBON 0.25W	5%	5K6Ω
R1332	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1333	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1334	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1336	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R1337	ERD25TJ392	CARBON 0.25W	5%	3K9Ω
R1338	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R1339	ERD25TJ101	CARBON 0.25W	5%	100Ω
R1342	ERD25TJ123	CARBON 0.25W	5%	12KΩ
R1345	ERD25TJ472	CARBON 0.25W	5%	4K7Ω
R1347	ERD25TJ472	CARBON 0.25W	5%	4K7Ω
R2101	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R2102	ERJ6GMYJ470	S.M.CARB 0.1W	5%	47Ω
R2103	ERJ6GMYJ562	S.M.CARB 0.1W	5%	5K6Ω
R2104	ERJ6GMYJ562	S.M.CARB 0.1W	5%	5K6Ω
R2105	ERJ6GMYJ391	S.M.CARB 0.1W	5%	390Ω
R2106	ERJ6GMYJ680	S.M.CARB 0.1W	5%	68Ω
R2107	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R2108	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R2110	ERD2FCG680	CARBON 2W	2%	68Ω
R2111	ERJ6GMYJ122	S.M.CARB 0.1W	5%	1K2Ω
R2112	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R2113	ERJ6GMYJ182	S.M.CARB 0.1W	5%	1K8Ω
R2114	ERJ6GMYJ333	S.M.CARB 0.1W	5%	33KΩ
R2115	ERJ6GMYJ562	S.M.CARB 0.1W	5%	5K6Ω
R2116	ERJ6GMYJ272	S.M.CARB 0.1W	5%	2K7Ω
R2117	ERJ6GMYJ681	S.M.CARB 0.1W	5%	680Ω
R2118	ERJ6GMYJ331	S.M.CARB 0.1W	5%	330Ω
R2119	ERJ6GMYJ822	S.M.CARB 0.1W	5%	8K2Ω
R2120	ERJ6GMYJ331	S.M.CARB 0.1W	5%	330Ω
R2121	ERD2FCG100	CARBON 2W	5%	10Ω
R2134	ERJ6GMYJ271	S.M.CARB 0.1W	5%	270Ω
R2135	ERJ6GMYJ471	S.M.CARB 0.1W	5%	470Ω
R2136	ERD2FCG330	CARBON 2W	2%	33\$
R2201	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R2202	ERJ6GMYJ393	S.M.CARB 0.1W	5%	39KΩ
R2203	ERJ6GMYJ223	S.M.CARB 0.1W	5%	22KΩ
R2204	EVND4AA00B54	STEREO SEP.		50KΩ
R2205	ERJ6GMY0R00	S.M. WIRE LINK		
R2207	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R2208	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R2210	ERJ6GMY0R00	S.M. WIRE LINK		
R2212	ERJ6GMYJ474	S.M.CARB 0.1W	5%	470KΩ
R2218	ERJ6GMYJ471	S.M.CARB 0.1W	5%	470Ω
R2219	ERJ6GMYJ471	S.M.CARB 0.1W	5%	470Ω
R2410	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R2411	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R2415	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R2417	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R2418	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R2420	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R2421	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R2422	ERD25TJ102	CARBON 0.25W	5%	1KΩ
R2426	ERD25TJ103	CARBON 0.25W	5%	10KΩ
R2429	ERD25TJ273	CARBON 0.25W	5%	27KΩ
R2451	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R2452	ERJ6GMYJ153	S.M.CARB 0.1W	5%	15KΩ
R2453	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R2454	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R2455	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R2456	ERJ6GMYJ223	S.M.CARB 0.1W	5%	22KΩ
R2457	ERJ6GMYJ223	S.M.CARB 0.1W	5%	22KΩ
R2458	ERJ6GMYJ123	S.M.CARB 0.1W	5%	12KΩ
R2459	ERJ6GMYJ153	S.M.CARB 0.1W	5%	15KΩ

Ref No.	Part No.	Description		
R2460	ERJ6GMYJ104	S.M.CARB 0.1W	5%	100KΩ
R2461	ERJ6GMYJ223	S.M.CARB 0.1W	5%	22KΩ
R2462	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R2463	ERJ6GMYJ183	S.M.CARB 0.1W	5%	18KΩ
R2464	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R2465	ERJ6GMYJ123	S.M.CARB 0.1W	5%	12KΩ
R2466	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R2467	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R2468	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R2469	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R2470	ERQ14AJW560	FUSABLE 0.25W	5%	56Ω
R2651	ERG1ANJ221	METAL 1W	5%	220Ω
R2652	ERG1ANJ221	METAL 1W	5%	220Ω
R2659	ERD25TJ2R2	CARBON 0.25W	5%	2R2Ω
R2660	ERD25TJ2R2	CARBON 0.25W	5%	2R2Ω
R3001	ERJ6GMYJ222	S.M.CARB 0.1W	5%	2K2Ω
R3002	ERJ6GMY0R00	S.M. WIRE LINK		
R3003	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3004	ERJ6GMYJ220	S.M. CARB 0.1W	5%	22Ω
R3005	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3007	ERJ6GMYJ563	S.M.CARB 0.1W	5%	56KΩ
R3008	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R3009	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R3010	ERJ6GMYJ104	S.M.CARB 0.1W	5%	100KΩ
R3011	ERJ6GMYJ750	S.M. CARB 0.1W	5%	75Ω
R3012	ERJ6GMYJ221	S.M.CARB 0.1W	5%	220Ω
R3013	ERJ6GMYJ471	S.M.CARB 0.1W	5%	470Ω
R3015	ERJ6GMYJ511	S.M.CARB 0.1W	5%	510Ω
R3018	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R3019	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R3020	ERJ6GMYJ750	S.M. CARB 0.1W	5%	75Ω
R3021	ERQ14AJW100	METAL 0.25W	5%	10Ω
R3022	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3023	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3024	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3025	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3026	ERJ6GMYJ563	S.M.CARB 0.1W	5%	56KΩ
R3027	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R3028	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R3029	ERJ6GMYJ333	S.M.CARB 0.1W	5%	33KΩ
R3030	ERJ6GMYJ680	S.M.CARB 0.1W	5%	68Ω
R3031	ERDS1FYJ101	CARBON 0.5W	5%	100Ω
R3032	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R3034	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3035	ERJ6GMYJ561	S.M.CARB 0.1W	5%	560Ω
R3036	ERJ6GMYJ561	S.M.CARB 0.1W	5%	560Ω
R3037	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3039	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R3040	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R3041	ERJ6GMYJ221	S.M.CARB 0.1W	5%	220Ω
R3042	ERJ6GMYJ682	S.M.CARB 0.1W	5%	6K8Ω
R3043	ERJ6GMYJ682	S.M.CARB 0.1W	5%	6K8Ω
R3044	ERJ6GMYJ222	S.M.CARB 0.1W	5%	2K2Ω
R3045	ERJ6GMYJ222	S.M.CARB 0.1W	5%	2K2Ω
R3046	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R3047	ERJ6GMYJ183	S.M.CARB 0.1W	5%	18KΩ
R3048	ERJ6GMYJ681	S.M.CARB 0.1W	5%	680Ω
R3049	ERJ6GMYJ562	S.M.CARB 0.1W	5%	5K6Ω
R3050	ERJ6GMYJ562	S.M.CARB 0.1W	5%	5K6Ω
R3051	ERJ6GMYJ102	S.M.CARB 0.1W	5%	1KΩ
R3052	ERJ6GMYJ473	S.M.CARB 0.1W	5%	47KΩ
R3053	ERJ6GMYJ473	S.M.CARB 0.1W	5%	47KΩ
R3054	ERJ6GMYJ103	S.M.CARB 0.1W	5%	10KΩ
R3055	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3056	ERJ6GMYJ273	S.M.CARB 0.1W	5%	27KΩ
R3057	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω
R3058	ERJ6GMYJ273	S.M.CARB 0.1W	5%	27KΩ
R3059	ERJ6GMYJ473	S.M.CARB 0.1W	5%	47KΩ
R3060	ERJ6GMYJ473	S.M.CARB 0.1W	5%	47KΩ
R3061	ERJ6GMYJ750	S.M. CARB 0.1W	5%	75Ω
R3062	ERJ6GMYJ101	S.M.CARB 0.1W	5%	100Ω

**TX-28X1C/TX25X1C**  
**TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description				
R3063	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3064	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220Ω	
R3065	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220Ω	
R3066	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R3067	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3068	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R3069	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3070	ERJ6GMYJ750	S.M.CARB	0.1W	5%	75Ω	
R3072	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220Ω	
R3073	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3074	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3075	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3077	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3078	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3079	ERJ6GMYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3080	ERJ6GMYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3081	ERJ6GMYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3082	ERJ6GMYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3085	ERJ6GMYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3086	ERJ6GMYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3089	ERJ6GMY0R00	S.M.WIRE	LINK			
R3090	ERJ6GMYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3091	ERJ6GMYJ221	S.M.CARB	0.1W	5%	220Ω	
R3093	ERJ6GMYJ561	S.M.CARB	0.1W	5%	560Ω	
R3094	ERJ6GMYJ561	S.M.CARB	0.1W	5%	560Ω	
R3096	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3097	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3099	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3159	ERD25TJ273	CARBON	0.25W	5%	27KΩ	
R3160	ERD25TJ392	CARBON	0.25W	5%	3K9Ω	
R3161	ERD25TJ104	CARBON	0.25W	5%	100KΩ	
R3162	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R3163	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3164	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3165	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R3166	ERD25TJ104	CARBON	0.25W	5%	100KΩ	
R3168	ERD25TJ750	CARBON	0.25W	5%	75Ω	
R3169	ERD25TJ473	CARBON	0.25W	5%	47KΩ	
R3170	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R3171	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3172	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3173	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3175	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R3176	ERD25TJ473	CARBON	0.25W	5%	47KΩ	
R3178	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R3179	ERD25TJ750	CARBON	0.25W	5%	75Ω	
R3180	ERD25TJ750	CARBON	0.25W	5%	75Ω	
R3181	ERD25TJ750	CARBON	0.25W	5%	75Ω	
R3182	ERD25TJ680	CARBON	0.25W	5%	68Ω	
R3183	ERD25TJ332	CARBON	0.25W	5%	3K3Ω	
R3184	ERD25TJ682	CARBON	0.25W	5%	6K8Ω	
R3185	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R3187	ERD25TJ682	CARBON	0.25W	5%	6K8Ω	
R3188	ERDS1FYJ101	CARBON	0.5W	5%	100Ω	▲
R3189	ERD25TJ392	CARBON	0.25W	5%	3K9Ω	
R3190	ERD25TJ392	CARBON	0.25W	5%	3K9Ω	
R3191	ERD25TJ333	CARBON	0.25W	5%	33KΩ	
R3192	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R3193	ERD25TJ392	CARBON	0.25W	5%	3K9Ω	
R3195	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3196	ERD25TJ750	CARBON	0.25W	5%	75Ω	
R3197	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3199	ERD25TJ392	CARBON	0.25W	5%	3K9Ω	
R3301	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3302	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3303	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R3304	ERD25TJ123	CARBON	0.25W	5%	12KΩ	
R3305	ERD25TJ152	CARBON	0.25W	5%	1K5Ω	
R3306	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3307	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3308	ERD25TJ222	CARBON	0.25W	5%	2K2Ω	

Ref No.	Part No.	Description				
R3309	ERO25CKF8201	METAL	0.25W	1%	8K2Ω	▲
R3310	ERO25CKF2801	METAL	0.25W	1%	2.8KΩ	▲
R3312	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R3313	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3314	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3315	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R3316	ERD25TJ472	CARBON	0.25W	5%	4K7Ω	
R3317	ERD25TJ753	CARBON	0.25W	5%	75KΩ	
R3318	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R3319	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3320	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3322	ERD25TJ682	CARBON	0.25W	5%	6K8Ω	
R3323	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3324	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3325	ERD25TJ562	CARBON	0.25W	5%	5K6Ω	
R3326	ERD25TJ562	CARBON	0.25W	5%	5K6Ω	
R3327	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3328	ERD25TJ564	CARBON	0.25W	5%	560KΩ	
R3329	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3330	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3331	ERD2FCG100	CARBON	0.25W	2%	10Ω	
R3332	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3333	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3334	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3338	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3339	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3340	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3342	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3343	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3344	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3345	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3346	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3347	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3348	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3349	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3350	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R3351	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R3352	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R3353	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3354	ERD25TJ684	CARBON	0.25W	5%	680KΩ	
R3501	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3502	ERJ6GMYJ392	S.M.CARB	0.1W	5%	3K9Ω	
R3503	ERJ6GMYJ471	S.M.CARB	0.1W	5%	470Ω	
R3504	ERJ6GMYJ822	S.M.CARB	0.1W	5%	8K2Ω	
R3506	ERD25TJ151	CARBON	0.25W	5%	150Ω	
R3511	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3512	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3513	ERJ6GMYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3514	EVND4AA00B14	TEXT CONTRAST			10KΩ	
R3515	ERJ6GMYJ392	S.M.CARB	0.1W	5%	3K9Ω	
R3516	ERJ6GMYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3519	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3522	ERJ6GMYJ273	S.M.CARB	0.1W	5%	27KΩ	
R3523	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3525	ERJ6GMYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3528	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3529	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3530	ERQ14AJW100	METAL	0.25W	5%	10Ω	▲
R3532	ERJ6GMYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3533	ERJ6GMYJ331	S.M.CARB	0.1W	5%	330Ω	
R3534	ERJ6GMYJ750	S.M.CARB	0.1W	5%	75Ω	
R3535	ERJ6GMYJ750	S.M.CARB	0.1W	5%	75Ω	
R3536	ERJ6GMYJ750	S.M.CARB	0.1W	5%	75Ω	
R3537	ERJ6GMY0R00	S.M.WIRE	LINK			
R3538	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3539	ERJ6GMY0R00	S.M.WIRE	LINK			
R3540	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3541	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3542	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3543	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3544	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	

**TX-28X1C/TX25X1C  
TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description				
R3545	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3546	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3547	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3548	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3549	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3556	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3564	ERJ6GMYJ220	S.M.CARB	0.1W	5%	22Ω	
R3565	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3566	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3567	ERJ6GMYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3568	ERJ6GMYJ822	S.M.CARB	0.1W	5%	8K2Ω	
R3573	ERJ6GMYJ331	S.M.CARB	0.1W	5%	330Ω	
R3574	ERJ6GMYJ391	S.M.CARB	0.1W	5%	390Ω	
R3575	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3580	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3582	ERJ6GMYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3584	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3585	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3586	ERJ6GMYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3587	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3588	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3589	ERJ6GMYJ181	S.M.CARB	0.1W	5%	180Ω	
R3590	ERJ6GMYJ181	S.M.CARB	0.1W	5%	180Ω	
R3591	ERJ6GMYJ181	S.M.CARB	0.1W	5%	180Ω	
R3593	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3594	ERJ6GMYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3595	ERJ6GMYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3596	ERJ6GMYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3597	ERJ6GMYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3598	ERJ6GMYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3604	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3605	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3608	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3613	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3614	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3615	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3616	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3618	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3620	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3621	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3622	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3623	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3624	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3625	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3627	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3628	ERJ6GMYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3629	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	
R3630	ERJ6GMYJ101	S.M.CARB	0.1W	5%	100Ω	

Ref No.	Part No.	Description				
D331	MA4062	DIODE				
D355	MA165TA5	DIODE				
D356	MA165TA5	DIODE				
D357	MA165TA5	DIODE				
D358	MA165TA5	DIODE				
D451	BYD31D-26MM	DIODE				
D452	MA165TA5	DIODE				
D453	MA165TA5	DIODE				
D501	ERA15-02V3	DIODE				
D502	MA700TA5	DIODE				
D503	MA165TA5	DIODE				
D504	MA4051	DIODE				
D505	MA165TA5	DIODE				
D511	MA4047	DIODE				
D533	MA4091	DIODE				
D534	MA165TA5	DIODE				
D541	MA4360	DIODE				
D551	BYD31D-26MM	DIODE				
D552	MA167TA5	DIODE				
D554	BYD31D-26MM	DIODE				
D560	MA165TA5	DIODE				
D600	MA858TA5	DIODE				
D601	MA858TA5	DIODE				
D602	MA165TA5	DIODE				
D604	MA165TA5	DIODE				
D605	MA4051	DIODE				
D611	MA165TA5	DIODE				
D617	MA29TA5	DIODE				
D619	MA4068HTA	DIODE				
D620	MA165TA5	DIODE				
D641	MA4039	DIODE				
D671	MA165TA5	DIODE				
D701	MA165TA5	DIODE				
D702	MA4360	DIODE				
D751	ERD07-15L7	DIODE				
D752	TVSRU2AM	DIODE				
D811	232266296209	THERMISTOR				
D821	RBV4-08	DIODE				
D822	ERA22-04V3	DIODE				
D823	ERA22-08V3	DIODE				
D825	TVSRU2AM	DIODE				
D826	TLP621GR-LF2	PHOTO COUPLER	▲			
D828	MA4360	DIODE				
D851	RU4BLF-L1	DIODE				
D852	TVSRU2AM	DIODE				
D853	RU4AMLF-M1	DIODE				
D855	FML22SLF610	DIODE				
D870	MA4082	DIODE				
D871	MA165TA5	DIODE				
D880	MA165TA5	DIODE				
D890	MA165TA5	DIODE				
D891	MA165TA5	DIODE				
D893	MA165TA5	DIODE				
D1101	LN81RPHL	DIODE				
D1131	TVSRM10B	DIODE				
D1132	TVSRM10B	DIODE				
D1208	TVSS1WBS10	DIODE				
D1225	MA4082	DIODE				
D1232	MA4033	DIODE				
D1235	MA165TA5	DIODE				
D1243	MA165TA5	DIODE				
D1250	MA4068HTA	DIODE				
D1253	MA165TA5	DIODE				
D1255	MA165TA5	DIODE				
D2201	MA700TA5	DIODE				
D2405	MA4056	DIODE				
D2406	MA4056	DIODE				
D2451	MA4020	DIODE				
D3002	MA165TA5	DIODE				
D3004	MA165TA5	DIODE				
D3006	MA165TA5	DIODE				

**DIODES**

D19	MA4047	DIODE
D173	MA4056	DIODE
D174	MA29TA5	DIODE
D175	MA29TA5	DIODE
D201	MA165TA5	DIODE
D206	MA165TA5	DIODE
D207	MA165TA5	DIODE
D209	MA4056	DIODE
D210	MA165TA5	DIODE
D250	MA165TA5	DIODE
D251	MA700TA5	DIODE
D252	MA700TA5	DIODE
D304	MA858TA5	DIODE
D305	MA4130	DIODE
D306	MA4130	DIODE
D307	MA4130	DIODE
D309	MA858TA5	DIODE
D314	MA4033	DIODE
D316	MA165TA5	DIODE

Ref No.	Part No.	Description
D3007	MA165TA5	DIODE
D3008	MA165TA5	DIODE
D3009	MA165TA5	DIODE
D3010	MA165TA5	DIODE
D3011	MA165TA5	DIODE
D3012	MA165TA5	DIODE
D3013	MA165TA5	DIODE
D3016	MA4120	DIODE
D3017	MA4120	DIODE
D3162	MA165TA5	DIODE
D3163	MA165TA5	DIODE
D3176	MA165TA5	DIODE
D3301	MA858TA5	DIODE
D3302	MA29TA5	DIODE
D3303	MA165TA5	DIODE
D3304	MA165TA5	DIODE
D3305	MA165TA5	DIODE
D3306	MA165TA5	DIODE
D3307	MA4068HTA	DIODE
D3308	MA165TA5	DIODE
D3309	MA700TA5	DIODE
D3310	MA165TA5	DIODE
D3311	MA165TA5	DIODE
D3503	MA165TA5	DIODE
D3504	MA165TA5	DIODE
D3505	MA165TA5	DIODE
D3509	MA4082	DIODE
D3526	MA165TA5	DIODE
D3527	MA4082	DIODE
D3531	MA165TA5	DIODE
D3541	MA165TA5	DIODE
D3542	MA165TA5	DIODE
DL300	TLK160891E	

### INTEGRATED CIRCUITS

IC070	UPC574J	REGULATOR
IC101	M51362SP	SPLIT VIF/SIF
IC179	L78M12MRB	12V REGULATOR
IC180	MM1021XS	SYNC DETECTOR
IC251	LA4280-TV	AUDIO OUTPUT
IC301	CX20125	BLACK LEVEL EXPANDER
IC303	TDA3504	VIDEO CONTROL
IC451	TDA3654	VERTICAL OUTPUT I.C.
IC501	TDA2579B	DEFLECTION I.C.
IC601	TDA4650-V4	COLOUR DECODER
IC602	TDA4661-V2	DELAY LINE
IC701	TDA4950	E/W CORRECTION
IC821	STR56041-M	TRANSISTOR
IC851	L78M12MRB	12V REGULATOR
IC1131	SBX1620-46	REMOTE RECEIVER
IC1202	ST24C02AB1	EEPROM
IC1204	L78M05MRB	5V REGULATOR
IC1212	MN1280R	RESET
IC1213	MN1872432TMF	MICRO
IC2102	AN5215	SOUND I.F.
IC2201	TDA8417	STEREO DECODER
IC2402	CXA1279AS	AUDIO PRE-AMP
IC2451	TDA3810	AMBIENCE CONTROL
IC3001	LA7222-TV	SWITCHING
IC3002	M52472P	SWITCHING
IC3301	AN5860	SWITCHING
IC3302	AN5862K	SWITCHING
IC3501	SAA5246APEM6	TELETEXT DECODER
IC3503	ST24C02AB1	EEPROM
IC3505	L78M05MRB	5V REGULATOR
IC3506	LC3664AL-10	S.RAM MEMORY
IC3507	PCB83C654028	TELETEXT CONTROL
IC3508	TC4066BP	SWITCHING

Ref No.	Part No.	Description
<b>COILS</b>		
L12	ELESN181KA	COIL
L13	EXCELDR35V	COIL
L101	ELESN1R8KA	COIL
L102	ELESN4R7KA	COIL
L105	EIV7EN054B	COIL
L106	EIV7EN055B	COIL
L110	EIV7ES711B	COIL
L112	TLT392K991R	COIL
L121	ELESN100KA	COIL
L130	ELESN220KA	COIL
L131	ELESN680KA	COIL
L133	ELESN150KA	COIL
L137	ELESN180KA	COIL
L351	ELESN181KA	COIL
L352	ELESN181KA	COIL
L353	ELESN181KA	COIL
L482	ELESN8R2KA	COIL
L552	ELC08D055	COIL
L553	ELH5L713	COIL
L554	ELC15B004	COIL
L600	EIK7ES723B	COIL
L601	ELESN100KA	COIL
L603	EIK7ES717B	COIL
L604	ELESN100KA	COIL
L681	ELESN220KA	COIL
L682	ELESN390KA	COIL
L701	ELESN8R2KA	COIL
L751	ELC10D006	COIL
L811	ELF18D450L	FILTER
L812	ELF18D450L	FILTER
L823	EXCELSA24T	COIL
L824	EXCELSA24T	COIL
L852	EXCELSA24T	COIL
L853	TLT030L119C	COIL
L857	EXCELSA35T	COIL
L859	EXCELSA24T	COIL
L861	EXCELDR35V	COIL
L1131	ELESN100KA	COIL
L1200	ELEXT100KA	COIL
L1201	ELEXT100KA	COIL
L1203	ELEXT100KA	COIL
L1204	ELKTR150GA	COIL
L1205	ELESN8R2KA	COIL
L1206	ELEXT100KA	COIL
L1210	ELEXT100KA	COIL
L1220	ELEXT100KA	COIL
L1223	ELEXT100KA	COIL
L1232	ELKTR150GA	COIL
L1233	ELKTR150GA	COIL
L1234	ELKTR150GA	COIL
L1235	ELEXT100KA	COIL
L1236	EXCELSA35T	COIL
L1238	EXCELDR35V	COIL
L1240	ELESN100KA	COIL
L1241	ELEXT100KA	COIL
L1246	ELEXT1R0KA	COIL
L1247	ELEXT100KA	COIL
L1248	ELEXT100KA	COIL
L1250	ELEXT100KA	COIL
L1252	ELEXT100KA	COIL
L1253	ELEXT100KA	COIL
L1254	ELEXT100KA	COIL
L1255	ELEXT100KA	COIL
L2102	ELESN1R2KA	COIL
L2103	ELESN680KA	COIL
L2105	ELESN4R7KA	COIL
L2106	ELESN1R2KA	COIL
L2110	EIS7EN036B	COIL
L2112	TLS153X53Q	COIL

**TX-28X1C/TX25X1C  
TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description
L2451	ELESN100KA	COIL
L2651	TLS159054E	COIL
L2652	TLS159054E	COIL
L2653	TLS159054E	COIL
L2654	TLS159054E	COIL
L2655	EXCELDR35V	COIL
L2656	EXCELDR35V	COIL
L3001	ELESN100KA	COIL
L3002	EXCELDR35V	COIL
L3003	EXCELDR35V	COIL
L3004	EXCELDR35V	COIL
L3005	EXCELDR35V	COIL
L3006	ELESN100KA	COIL
L3008	EXCELDR35V	COIL
L3009	EXCELDR35V	COIL
L3161	EXCELDR35V	COIL
L3162	EXCELDR35V	COIL
L3163	ELESN470KA	COIL
L3167	ELESN220KA	COIL
L3177	ELESN220KA	COIL
L3501	ELEV4R7KA	COIL
L3502	ELESN100KA	COIL
L3503	ELESN4R7KA	COIL
L3504	ELESN100KA	COIL
L3505	ELESN100KA	COIL
L3507	ELESN100KA	COIL
L3510	ELESN100KA	COIL
LC101	ELB5A077	COIL
LC103	ELB5A083	COIL
LC301	TLK160890E	COIL
LC2148	EIL7EN013Q	COIL

**TRANSISTORS**

Q101	BC847B	TRANSISTOR
Q130	BC857B	TRANSISTOR
Q131	BF370	TRANSISTOR
Q201	2SA1309ATA	TRANSISTOR
Q250	2SC3311ATA	TRANSISTOR
Q301	BC847B	TRANSISTOR
Q302	2SD965-R	TRANSISTOR
Q303	BC847B	TRANSISTOR
Q305	BC857B	TRANSISTOR
Q307	UN2214TX	TRANSISTOR
Q318	BC847B	TRANSISTOR
Q351	2SC4714RL2	TRANSISTOR
Q352	2SC4714RL2	TRANSISTOR
Q353	2SC4714RL2	TRANSISTOR
Q356	2SA719-TA	TRANSISTOR
Q401	2SC3311ATA	TRANSISTOR
Q502	2SC3311ATA	TRANSISTOR
Q503	2SC3311ATA	TRANSISTOR
Q531	2SD836-AL	TRANSISTOR
Q532	2SC3311ATA	TRANSISTOR
Q533	2SC3311ATA	TRANSISTOR
Q541	2SA1309ATA	TRANSISTOR
Q542	2SC3311ATA	TRANSISTOR
Q554	2SD1577RL	TRANSISTOR
Q600	BC857B	TRANSISTOR
Q602	BC847B	TRANSISTOR
Q603	BC847B	TRANSISTOR
Q605	BC847B	TRANSISTOR
Q640	BC857B	TRANSISTOR
Q671	BC847B	TRANSISTOR
Q681	BC847B	TRANSISTOR
Q682	BC857B	TRANSISTOR
Q693	BC847B	TRANSISTOR
Q701	UN4211TA	TRANSISTOR
Q821	2SD965-R	TRANSISTOR
Q822	2SD965-R	TRANSISTOR

Ref No.	Part No.	Description
Q851	UN4111TA	TRANSISTOR
Q880	2SA1018Q	TRANSISTOR
Q890	2SC3311ATA	TRANSISTOR
Q1131	2SC3311ATA	TRANSISTOR
Q1132	UN4213TA	TRANSISTOR
Q1201	2SC3311ATA	TRANSISTOR
Q1215	2SC3311ATA	TRANSISTOR
Q1216	2SC3311ATA	TRANSISTOR
Q1255	2SC3311ATA	TRANSISTOR
Q2101	2SC1047-BCD	TRANSISTOR
Q2102	2SC2480TX	TRANSISTOR
Q2103	BC847B	TRANSISTOR
Q2408	2SC3311ATA	TRANSISTOR
Q2409	2SC3311ATA	TRANSISTOR
Q2410	2SA1309ATA	TRANSISTOR
Q2451	UN2210TX	TRANSISTOR
Q3001	2SD1865TV2	TRANSISTOR
Q3003	2SC1318-S	TRANSISTOR
Q3004	2SD1865TV2	TRANSISTOR
Q3006	BC847B	TRANSISTOR
Q3007	2SC2480TX	TRANSISTOR
Q3008	BC847B	TRANSISTOR
Q3009	BC847B	TRANSISTOR
Q3010	BC847B	TRANSISTOR
Q3011	BC847B	TRANSISTOR
Q3012	BC847B	TRANSISTOR
Q3014	UN2211TX	TRANSISTOR
Q3017	BC847B	TRANSISTOR
Q3019	2SD1865TV2	TRANSISTOR
Q3020	2SD1865TV2	TRANSISTOR
Q3022	BC857B	TRANSISTOR
Q3023	BC857B	TRANSISTOR
Q3159	2SA1309ATA	TRANSISTOR
Q3161	2SD1865TV2	TRANSISTOR
Q3162	2SD1865TV2	TRANSISTOR
Q3163	2SC3311ATA	TRANSISTOR
Q3164	UN4211TA	TRANSISTOR
Q3165	2SA1309ATA	TRANSISTOR
Q3166	2SA1309ATA	TRANSISTOR
Q3167	2SC1318-S	TRANSISTOR
Q3168	2SC3311ATA	TRANSISTOR
Q3301	2SC3311ATA	TRANSISTOR
Q3302	2SC3311ATA	TRANSISTOR
Q3303	2SC3311ATA	TRANSISTOR
Q3304	2SC3311ATA	TRANSISTOR
Q3305	2SC3311ATA	TRANSISTOR
Q3306	2SC3311ATA	TRANSISTOR
Q3330	2SA1309ATA	TRANSISTOR
Q3331	2SA1309ATA	TRANSISTOR
Q3332	2SA1309ATA	TRANSISTOR
Q3501	BC847B	TRANSISTOR
Q3502	BC847B	TRANSISTOR
Q3506	BC847B	TRANSISTOR
Q3515	BC847B	TRANSISTOR
Q3522	BC857B	TRANSISTOR
Q3523	UN2213TX	TRANSISTOR
<b>SWITCHES</b>		
S401	EVQRBAL10	SWITCH
S471	EVQRDSL12	SWITCH
S811	ESB99902V	POWER SWITCH
S1105	EVQQBH12T	SWITCH
S1107	EVQQBH12G	SWITCH
S1109	EVQQBH12G	SWITCH
S1110	EVQQBH12G	SWITCH
S1111	EVQQBH12G	SWITCH
S1112	EVQQBH12G	SWITCH

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Ref No.	Part No.	Description			Ref No.	Part No.	Description					
S1113	EVQQBH12T	SWITCH			<b>FILTERS</b>							
S1114	EVQQBH12T	SWITCH			X101	G1962-M100	SAW FILTER					
S1115	EVQQBH12T	SWITCH			X131	TAFTPS5.5MB	CERAMIC FILTER					
S1116	EVQQBH12T	SWITCH			X181	TAFCSB503F15	FILTER					
S1117	EVQQBH12T	SWITCH			X601	TSS2003-M	CRYSTAL					
<b>TRANSFORMERS</b>					X1210	EFOGC6004A4	FILTER					
T101	EIV7EN078B	COIL			X2101	EFCH33MVK1N	FILTER					
T531	ETH19Y53AY	TRANSFORMER			X2106	TAFSFE5.74MC	FILTER					
T551	TLF15570B	FLYBACK TRANSFORMER			X2107	TAFSFE5.74MC	FILTER					
T821	ETS49AC187AD	TRANSFORMER			X2108	TAFSFE5.5MBF	CRYSTAL OSCILLATOR					
T1201	ETP35KE65E	TRANSFORMER			X2109	TAFSFE5.5MBF	CRYSTAL OSCILLATOR					
					X2201	TSS2076-M	CRYSTAL					
					X3501	TSS2121-B	CRYSTAL					
					X3601	TSS2080-M	CRYSTAL					
<b>NOTE : DIFFERENCE LIST SHOWN BELOW IS BETWEEN TX-28X1C AND TX-25X1C.</b>												
<b>CAPACITORS</b>					R457	ERDS2TJ332T	CARBON	0.25W	5% 3.3KΩ			
C351	ECCR1H391JS	CERAMIC	50V	390pF	R458	ERDS2TJ472T	CARBON	0.25W	5% 4.7KΩ			
C457	ECQV1H334JV3	FILM	50V	470nF	R459	ERDS2TJ473T	CARBON	0.25W	5% 47KΩ			
C462	DELETE				R460	ERDS2TJ273T	CARBON	0.25W	5% 27KΩ			
C552	ECWF2H514JNB	FILM	500V	510nF	R462	ERDS1TJ1R5T	CARBON	0.5W	5% 1.5Ω			
C560	ECWF2H684JNB	FILM	500V	680nF	R469	ERDS1TJ151T	CARBON	0.5W	5% 150Ω			
C565	ECKW3F182JBP	CERAMIC	3KV	1.5nF	R544	ERQ14AJ181P	FUSIBLE	0.25W	5% 180Ω			
<b>RESISTORS</b>					R557	ERQ12HJ1R8P	FUSIBLE	0.5W	5% 1.8Ω			
R314	ERJ6GMYJ183V	S.M. CARB	0.1W	5% 18KΩ	R562	ERQ12HJ1R5T	CARBON	0.5W	5% 130KΩ			
R404	ERDS2TJ224T	CARBON	0.25W	5% 220KΩ	R565	ERQ1CJP102S	FUSIBLE	1W	5% 1KΩ			
R453	ERDS2TJ302T	CARBON	0.25W	5% 3KΩ	R571	ERQ12HJ1R5P	FUSIBLE	0.5W	5% 1.5Ω			
R456	ERDS2TJ1R0T	CARBON	0.25W	5% 1Ω	<b>COILS</b>							
					L553	ELH5L738	COIL					
<b>NOTE : DIFFERENCE LIST SHOWN BELOW IS BETWEEN TX-25/28X1C AND TX-25/28X1CP</b>												
<b>CAPACITORS</b>					R3540	ERJ6GMY0R00V	S.M. WIRE LINK					
C166	ECUV1H103ZFX	S.M. CAP	50V	10nF	R3544	ERJ6GMYJ103V	S.M.CARB	0.1W	5% 10K			
C2124	ECUV1H103ZFX	S.M. CAP	50V	10nF	R3548	ERJ6GMY0R00V	S.M. WIRE LINK					
C2125	ECUV1H103ZFX	S.M. CAP	50V	10nF	R3549	ERJ6GMY0R00V	S.M. WIRE LINK					
C2158	ECRLA010A53R	TRIMMER CAP.		1pF	R3554	ERJ6GMYJ103V	S.M.CARB	0.1W	5% 1K			
C2161	ECUV1H150JCX	S.M. CAP.	50V	15pF	R3556	DELETE						
C2162	ECUV1H103ZFX	S.M. CAP	50V	10nF	R3557	ERJ6GMYJ102V	S.M.CARB	0.1W	5% 1K			
C3518	ECQB1H104KF3	FILM	50V	100nF	R3565	ERJ6GMY0R00V	S.M. WIRE LINK					
C3608	DELLTE				R3566	ERJ6GMYJ103V	S.M.CARB	0.1W	5% 10K			
C3611	DELETE				R3570	ERJ6GMYJ103V	S.M.CARB	0.1W	5% 10K			
<b>RESISTORS</b>					R3571	ERJ6GMYJ101V	S.M.CARB	0.1W	5% 100			
R165	ERJ6GMYJ562V	S.M.CARB	0.1W	5% 5.6K	R3572	ERJ6GMYJ103V	S.M.CARB	0.1W	5% 100			
R166	ERJ6GMYJ822V	S.M.CARB	0.1W	5% 8.2K	R3575	DELETE						
R167	ERJ6GMYJ222V	S.M.CARB	0.1W	5% 2.2K	R3587	ERJ6GMY0R00V	S.M. WIRE LINK					
R1122	ERDS2TJ392T	CARBON	0.25W	5% 3.9K	R3588	ERJ6GMY0R00V	S.M. WIRE LINK					
R1127	ERDS2TJ183T	CARBON	0.25W	5% 18K	R3604	DELETE						
R1223	ERDS2TJ102T	CARBON	0.25W	5% 1K	R3605	DELETE						
R1308	ERD25TJ102T	CARBON	0.25W	5% 1K	R3608	ERJ6GMY0R00V	S.M. WIRE LINK					
R2162	ERJ6GMYJ151V	S.M.CARB	0.1W	5% 150	R3613	DELETE						
R2163	ERJ6GMYJ562V	S.M.CARB	0.1W	5% 5.6K	R3614	DELETE						
R2164	ERJ6GMYJ472V	S.M.CARB	0.1W	5% 4.7K	R3615	DELETE						
R2181	ERJ6GMYJ182V	S.M.CARB	0.1W	5% 1.8K	R3616	DELETE						
R2182	ERJ6GMYJ822V	S.M.CARB	0.1W	5% 8.2K	R3618	DELETE						
R2183	ERJ6GMYJ103V	S.M.CARB	0.1W	5% 10K	R3620	DELETE						
R2184	ERJ6GMYJ392V	S.M.CARB	0.1W	5% 3.9K	R3621	DELETE						
R3528	ERJ6GMY0R00V	S.M. WIRE LINK			R3622	DELETE						
R3529	ERJ6GMY0R00V	S.M. WIRE LINK			R3623	DELETE						
R3538	DELETE				R3624	DELETE						
R3539	ERJ6GMYJ101V	S.M.CARB	0.1W	5% 100	R3625	DELETE						

**TX-28X1C/TX25X1C  
TX-28X1CP/TX25X1CP**

Ref No.	Part No.	Description
<b>SWITCHES</b>		
S1108	EVQQBH12G	SWITCH
<b>FILTERS</b>		
X132	TAFTPS6.5MB	FILTER
X2110	TAFSFE6.5MBF	FILTER
X2111	TAFSFE6.5MBF	FILTER
X3503	TSS2001-N1	FILTER
X3601	TSS2080MX	FILTER
<b>DIODES</b>		
D166	MA858TA5	DIODE
D2103	MA858TA5	DIODE
D2104	MA858TA5	DIODE
D2162	MA858TA5	DIODE
<b>INTEGRATED CIRCUITS</b>		
IC3501	SAA5246APHM6	TELETEXT DECODER
IC3507	PCF84C81P076	TELETEXT CONTROL

Ref No.	Part No.	Description
<b>WIRELINKS</b>		
JHFA	ERJ6GMY0R00V	S.M. WIRE LINK
JHFB	ERJ6GMY0R00V	S.M. WIRE LINK
JHFD	ERJ6GMY0R00V	S.M. WIRE LINK
JHFE	ERJ6GMY0R00V	S.M. WIRE LINK
JHFF	ERJ6GMY0R00V	S.M. WIRE LINK
JHFG	ERJ6GMY0R00V	S.M. WIRE LINK
JHFH	ERJ6GMY0R00V	S.M. WIRE LINK
JHTA	DELETE	
JHTC	DELETE	
JHTD	DELETE	
JHTF	DELETE	
<b>COILS</b>		
L133	ELESN8R2KA	COIL
L134	ELESN6R8KA	COIL
L166	ELESN102KA	COIL
L2161	ELESN102KA	COIL
L2162	ELESN102KA	COIL
<b>TRANSISTORS</b>		
Q1203	2SC3311ATA	TRANSISTOR